On the Origin of Partnerships:

the Modern Darwinist Guide to Brokering

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Summary

Cross-sector partnerships are a new and growing paradigm. Alliances between government, civil society and the private sector are tackling issues of sustainable development that have to date proved too complex for any one sector. Partnership practitioners, brokers, are only in recent years beginning to have access to a developing literature of case studies and guidelines to support their efforts.

By contrast, partnerships between species in the natural world are nothing new, and date back to partnerships between the earliest of life forms, the prokaryotic bacteria. These natural world partnerships have evolved by, and are subject to, the well established evolutionary processes of natural selection through environmental pressure.

Explanation of human action in terms of the Darwinian laws of the natural world has generally failed due to the complexity of human consciousness and society in comparison to other organisms. By understanding the areas which are common and those that are different due to these human societal affects, the cross-sector partnership broker may gain an insight into partnership function. Modern Darwinism substitutes human society for the environmental pressures of nature. Brokering skills are analysed in these terms.

This approach allows the broker to assess partnership progress and the brokers performance in it from an alternative, Modern Darwinist perspective. An application of this approach as an aid to broker self reflection is suggested.

Man, her last work, who seem'd so fair,

Such splendid purpose in his eyes,

Who roll'd the psalm to wintry skies,

Who built him fanes of fruitless prayer,

Who trusted God was love indeed

And love Creation's final law—

Tho' Nature, red in tooth and claw

With ravine, shriek'd against his creed—

56th stanza, "In Memorium A.H.H." (1850).

Alfred, Lord Tennyson.

1. Introduction

Mutualistic relationships between unalike species are a common feature of zoology and ecology. They have evolved multiple times and occur in different forms in every ecosystem on the planet. Not only are these relationships common, they have an important role in evolutionary history. In fact these relationships have had a fundamental influence in defining life on earth and the evolutionary process we are part of.

All inter species interactions are subject to the evolutionary laws of natural selection through environmental pressure. This is at the heart of Darwin's theories described in 'On the Origin of Species'.¹

Human cross sector partnerships have many apparent commonalities with natural world symbioses including their mutualistic nature and potential creative power. However the use of analogies in cross sector partnerships can prove to be misleading and the cause of serious misconceptions. If natural world relationships have any bearing on cross sector partnerships it is likely to be in understanding the commonalities and divergences between forces that govern them in the natural and human contexts.

Human society has grown complex and subtle in comparison to other life on earth but it still is a product of the natural world. 'Modern Darwinism' attempts to distinguish the Darwinian processes through the layers of culture that surround human interactions with each other. It is a way of thinking that describes human action in response to the pressures of human society as opposed to the natural environment.² It suggests that we still function as biological entities in response to our surroundings.

This essay proposes the hypothesis that in the same way that natural world mutualisms are underpinned by the forces of natural selection, much of cross sector partnership management is underpinned by Modern Darwinist principles.

If this is the case then a Modern Darwinist guide to brokering will provide the broker who is actively engaged in a partnership with a tool to aid reflection and analysis of problems and progress. This will go someway to making sense of the complexity of cross sector partnerships in the same way that natural selection makes sense of the complexity of nature.

2. Natural World Mutualistic Relationships

We are surrounded by relationships in the natural world where the participants are in a close, mutualistic partnership. Usually very different species with seemingly completely different needs, gain a benefit by associating with each other. Generally, we do not notice these relationships. Take a scene in a park or woodland almost anywhere in the world. Many of the trees have symbiotic fungi associated with their roots and the lichen that cover their bark are organisms resulting from a relationship between algae and fungi. Ants tend aphids, scale insects, caterpillars, or beetle larvae in the tree. Humans walk their dogs unaware of the symbiotic worms living in the dogs intestine. We too have gut symbionts and a host of bacteria and microscopic animals on our skin, teeth and even our eyelids. We are symbionts on a symbiotic planet and if we look we can find symbiosis everywhere.³

A number of definitions of these types of relationships exist and meanings have changed as scientific theory evoloved.⁴ In general, however, and for the sake of clarification the following definitions apply:

Mutualisms

Mutualisms exist when both partners are deemed to be gaining benefit from the relationship. The partners are not obligated to be with each other but chose to be so. They may be long term but also can be temporary associations.

There are very many examples with ant societies showing great diversity of partners, offering protection and receiving food or shelter in return. These types of behaviours have evolved many times and have been recorded from as long ago as the Cretaceous.⁵

Symbiosis

Symbiosis is the most specialized form of a mutualism. Symbiosis it is generally accepted to refer to long term associations through which partners gain some mutual benefit and have become dependant on it i.e. without each other neither would survive.

Endosymbiosis

Is when one partner (the symbionts) lives within the body of the other (the host). Generally both host and symbionts have physical adaptations that allow the others presence.

An example is the photosynthetic algae that live in the tissues of corals and many jellyfish providing them with an alternate energy source through sunlight. In return the algae receive nutrients and protection.

3. Understanding Mutualistic Behaviour in Terms of Darwin's Principles of Natural Selection

In the natural world species provide benefits to each other not because of any altruistic feelings for each other. Mutualisms could be described more accurately as mutual exploitation. Darwin challenged his readers to find an instance of a species having been modified solely for the benefit of another species "for such could not have been produced through natural selection". In brokering terms each species has a strong business case for collaboration, otherwise it terminates the relationship or is likely to be selected for extinction.

The 'business case' in the natural world is based on the concept of 'fitness'. Fitness can either be increasing the individuals' opportunity to survive, or to have progeny. Species with certain characters were selected for survival by how suitable their characteristics were under the environmental conditions at that time – how 'fit' they were. This he termed natural selection. He identified that adapted traits needed to be passed on by inherited characters. These characters were only identified and understood later through the science of genetics.

4. Interpreting Darwinian Principles to Cross-Sector Partnerships

Extrapolating between nature and society

Tennyson's famous description of nature as being 'red in tooth and claw' warns theologists, rather pessimistically, that love is unnatural. It may also serve as a warning to biologists attempting to employ natural laws within a human society context. Attempts at this have a long and sorry history as evidenced by fascism, ethnic cleansing and the rise of Nazism.^{7,2} The philosophies leading to these phenomena have their roots in 'social Darwinism', based on the principles of 'survival of the fittest' as proposed by Herbert Spencer, a 19th century follower of Darwin's thinking. This misunderstood translation of Darwin's concept of 'fitness' as 'best' when applied to human society resulted in divisions based on genetics as the rationale for uneven status and wealth distribution.⁸ This was also largely the basis of Kropotkins argument with Darwinism when he published 'Mutual aid: A factor of evolution'⁹ in 1902 in response to the 'survival of the fittest' mantra of Darwinism. Social Darwinism has no explanation for why humans cooperate or even for that matter why animals cooperate. Opposing views lead to the philosophy of Marxism with equally disastrous practical

application.²

Modern Darwinism and partnerships

Darwinism has always sat uncomfortably within the context of human societies. The role of trust, compassion and altruism are contrary to traditional Darwinian ideals of competition and the 'struggle for survival'. In general human societies do not demonstrate that they are 'red in tooth and claw'. Altruism plays a significant role in our society. This undermines Darwin's laws as applied to nature.

There are two facets of Modern Darwinism that distinguish it from the natural world based laws of its originator and other radical Darwin based philosophies. It substitutes the natural environment for the social structures and pressures that humans are subjected to through society to and it acknowledges the central role of trust in human evolution.² Modern Darwinism like recent game theory (eg the Prisoners Dilemma)¹⁰ recognizes the role that trust can have in society, outside of nepotism. Trust can prove to have advantages to both the community and to society.

Modern Darwinist thinking then allows us to substitute the red in tooth and claw' of nature with the social competition of human society. It recognizes that both competition and cooperation are integral to our development.²

Fitness in Modern Darwinism

Fitness still relates to the ability to mate through a perception of status but this is far more subjective than in the natural world. Status is highly dependent on the cultural and sectoral context. For example, within a corporate organisation the economic value added by the individual might be ranked higher than social outcomes achieved and their status measured accordingly. In an academic context status is measured by the quality of journals that accept an individuals papers for publication.

The key tenets of modern Darwinism are:

- i. Environmental pressure is applied through society
- ii. Fitness of an individual relates to status within their cultural context

An individual's behaviour can be described in terms of an attempt to adapting to these forces. Organisations too can be described as operating as organisms.^{11,12} These too, therefore, are subject to environmental pressure, economic for example.

5. Origin of Mutualisms

To illustrate the principles and the importance of environmental pressure, the origin of biological mutualisms is comparable to, or at least metaphorical of, the development of cross sector partnerships. Business with Communities was one of the first corporate vehicles specifically designed to facilitate cross sector partnerships. It came about through changes in the operational environment of the business.

The atmosphere of the early earth was largely devoid of oxygen. The bacterial life forms that existed were anaerobic and incapable of metabolizing oxygen, Cyanobacteria are a group of anaerobic bacteria that produce oxygen as a bi-product of anaerobic metabolism. This bi-product eventually built up to the point that atmospheric conditions were changed and oxygen became an important resource. Bacteria evolved to be able to use this resource and developed an aerobic respiration energy pathway. Anaerobic hetrotrophic bacteria – bacteria that feeds on a variety of food sources – engulfed aerobic bacteria, which took up residence within the new host. The aerobic bacteria received nutrients from its host. The host benefited from the aerobic energy available to its symbionts much like a fuel cell. This arrangement gave the new symbiotic organisms a competitive advantage and they are thought to have lead to the development of multicellular complex life.¹³

In the late 1980s and early 1990s the environmental movement in civil society was gaining strength and credence as scientific findings supported the voice of more radical 'green' political lobbyists and Non Government Organisations such as Greenpeace. Governments responded by increasing the pressure on natural resource companies to meet higher environmental and social standards in the way it went about its business. Rio Tinto, a mining company with a poor environmental and ethical reputation, in an industry with arguably the poorest ethical record began to have problems gaining licenses to explore and conduct mining business. It conducted a far reaching review and changed its operational standards reflected in a policy now called 'the way we work'. A result of this policy change was the formation of Business with Communities, a funding mechanism to facilitate closer relationships with environmental NGOs and communities local to its business units. Early industry – NGO cross sector partnerships developed from these relationships.

These two examples, vastly different in their timescales, drivers and outcomes both illustrate the importance of the operational environment and the pressures it can bring to bear. *An ability to adapt to environmental change result in both being selected for survival*. The discipline of organizational studies recognized that in many ways function as organisms.^{11,12} Rio Tinto's response to environmental change is classically Darwinian with fitness relating to economic gains and company growth.

6. Applying Modern Darwinism to brokering skills

By taking these concepts of environmental pressures and fitness the partnership practitioner can used Modern Darwinist thinking to gain an insight into partnership function at each stage of the partnership cycle. This can be applied equally at the organisational level as well as at the personal level. At each stage the practitioner must ask themselves:

- i. Do I understand the environmental pressure this organisation/person is experiencing in the context of their own sector/culture/organisation?
- ii. Do I understand this organizations/persons concept of fitness ie what do they consider to be status increases in their sectoral/cultural context?

If the answer is 'no' to either of these questions, gaining this understanding will increase the brokers chances of success. If the answer is 'yes' the broker then needs to decide how much he or she needs to do to enable the partners to have that same understanding. This is central to the broker's task.

A useful brokering self reflective exercise might be to apply these questions to each aspect of the partnership periodically, then having answered at each question thirdly ask what is my course of action as a result.

If we use the framework of the partnership cycle¹⁵ and aspects of the brokers changing role in it we can illustrate where Modern Darwinist thinking might be most useful. In the example below the Australian Museum – Rio Tinto is used but the principles will apply in any partnership situation.

Phase 1 Exploring, Scoping and Building

Broker's role:

a) To understand the scope and nature of the sustainable development challenge and if a partnership approach is appropriate.

What pressures are being brought to bear on these organisations? Rio Tinto require partners with biodiversity expertise in Australia to validate their social license to operate with the government and local communities to its mines, in a vitally important economic region for the company. The Australian Museum is under financial stress and pressure from government to demonstrate practical outcomes from its research. Could these pressures be satisfied outside of the partnership model?

b) Relationship Building

Identify the key players, e.g. Museum director, Head of External Affairs Rio Tinto, and attempt to understand their individual situations in terms of the organisations they represent then facilitate this exchange of information. Attempt to understand the pressures they are under from their own organisations and in their personal circumstances to gain an insight into their perception of fitness. If the partnership can contribute to increasing their fitness the relationship will become stronger. This approach can be taken with all personnel in the partnership eg mine managers, scientific staff, technical staff etc. This becomes a motivational force for these people to invest effort in the partnership and the partnership grows eventually without the broker.

c) Facilitation eg workshops

Understanding both the organisational contexts – the environmental pressures at work and the motivations of the people should then ease the brokers task of enabling cross communication between the players in a workshop situation.

Phase 2 Managing and Maintaining

a) Communications and managing departures and arrivals

Communications are vital during the implementation phase of the partnership. Tracking the changes in environmental pressures on both the partnership and the key people in it. These may well change over the course of the partnership. For example the Australian Museum had some senior management changes during the second year of the partnership. This changed the environmental pressures on middle management responsible for the partnership as senior management shifted institutional agendas. The broker can ensure these movements in pressures during the course of the partnership are understood by all parties.

Phase 3 Reviewing and Revising

The broker can apply Modern Darwinist thinking to the review process at the organisational, personnel as well as personal levels. Answering questions such as those below will help inform progress.

- 1. Have the environmental pressures on the organisations involved changed since partnership inception?
- 2. Has the partnership increased, or at least is it on course to increase, the partners' fitness as they perceive it? Have these perceptions changed?
- 3. Are the key players engaged sufficiently? If not is it because of unknown environmental pressure or has the broker failed to understand their cultural/sectoral context for fitness?

In the Australian Museum – Rio Tinto partnership a number of examples of the importance of asking these questions were proven during the PBAS mentored period. For example, question 3 on engaging key players had become problematic – this was due in both cases to the broker misunderstanding their requirements for status i.e. their perception of fitness.

Phase 4 Sustaining Outcomes, Exiting

The brokers role is to ensure the partners have considered the questions 1 and 2 from the review process. It is important the broker has addressed these questions and communicated them adequately to the partners so they can make an informed decision on the partnership future. By ensuring that the partnership achievements ie increase in fitness are emphasized, or at least recorded, the broker

will be either easing an exit process or providing the foundations for sustaining.

The degree to which the partners understand the other partner's environmental pressures and their motives is probably a good measure of how suitable it is for the broker to exit. If this is the case the broker should be fostering this understanding over the course of the partnership.

7. Modern Darwinism Underpinning Brokering Skills

There are a number of communication skills that the broker uses throughout the partnership cycle which are underpinned by Modern Darwinist thinking. Interest based negotiation provides the technique through which underlying interests behind a stated position can be revealed. If those interests can be addressed then a favorable outcome from the negotiation is more likely to be achieved for the parties concerned. Those interests all relate to either the environmental pressures being exerted or the perception of status as applied to that person. This has implications for dealing with difficult people as well as tasks such as internal selling. Both these were proven to be the case during the PBAS mentored period of the Australian Museum – Rio Tinto partnerships. A number of difficult people in the partnership proved to have very different perceptions of what increased their status in the environments they were working in. Understanding this was central to building capacity in the partnership for the broker to begin to exit.

In a partnership meeting there are likely to be very different environmental pressures and multiple versions of status in the room. The brokers challenge is to understand these subtleties and when necessary translate and communicate them between partners.

8. Conclusion and a Note on Language

The intention of this paper was to illustrate that the forces behind natural world mutualisms and cross sector partnerships are largely the same if applied using Modern Darwinist thinking. Humans react to societal pressures very much in a biological fashion and organisations can behave as organisms. The reason these actions can be difficult to interpret is that the variations in societal pressure as well as individuals perspectives of their place in it, produces a great variety of responses. Modern Darwinism goes some way to help the partnership broker unravel this complexity.

It was not however the intention to either add a further layer of biological language to an already unclear set of terminologies¹⁶ within the partnership paradigm. There is inherent danger in this. Neither was it to apply broad analogies between the natural world and cross sector partnerships, tempting as this is for a biologist. Experience has shown however that such simplistic analogies can be both misleading and confusing. The way of thinking described attempts to go someway to explaining the many subtleties and contrasting behaviours of people that a partnership practitioner deals with on a day to day basis.

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