

Article

Three Scales of Acephalous Organization

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Abstract: Dominance-based hierarchies have been taken for granted as the way we structure our organizations, but they are a part of a paradigm that has put our whole existence in peril. There is an urgent need to explore alternative paradigms that take us away from dystopic futures towards preferred, life enhancing paradigms based on wellbeing. One of the alternative ways of organizing ourselves that avoids much of the structural violence of existing organizations is the acephalous group (operating without any structured, ongoing leadership). Decision making becomes distributed, transitory and self-selecting. Such groups are not always appropriate and have their strengths and weaknesses, but they can be a more effective, humane way of organizing ourselves and can open windows to new ways of being. Acephalous groups operate at many different scales and adapt their structure accordingly. For this reason, a comparison of small, medium and large-scale acephalous groups reveals some of the dynamics involved in acephalous functioning and provides a useful overview of these emergent forms of organization and foreshadows the role they may play in future.

Keywords: acephalous; distributed leadership; scale; P2P; CLA

1. Introduction

The prevailing paradigm in today's world uses dominance-based hierarchical organizations that divide people [1] and confer greater value, status and rewards onto a select group within the whole [2,3]. Resentment between leaders and followers is common. This can be seen as structural violence [4,5] which can become so insidious that those suffering under the violence end up supporting their own oppression [6].

Alternative ways of organizing ourselves tend to be unconceivable or rarely considered, however, one potential "weak signal" that could indicate an emerging issue [7,8] to challenge the violence within the prevailing paradigm and lead to more humane organizations is that of acephalous functioning [9,10]. Acephalous organization is, however, not a panacea; people must still negotiate difference and individuals can still take advantage and abuse others. This paper examines the viability of acephalous groups and practical issues that arise for them. The anthropological sense of the word *acephalous* is intended here [10,11], being a group without an ongoing, structured leadership. Leadership becomes distributed, transitory, and self-selecting.

There is no purely acephalous organization. There will always be more influential participants. It is more fruitful to think of a continuum from a dominance hierarchy to acephalous organization. This research examines organizations near the acephalous end of the continuum.

This paper begins by exploring some systems concepts that help gain understanding of acephalous organization and is followed by a comparison between acephalous organizations and more conventional hierarchical organizations using a Causal Layered Analysis [12]. Next, acephalous organizations are placed into a global context before investigating issues relating to acephalous operation. One critical issue is that of scale, so case studies of long-standing acephalous groups at the small, medium and large scale are then presented:

- (1) At the small scale is the Tui Bee Balm co-operative
- (2) At the medium scale is Convergence, an annual gathering of 3–500 people interested in alternative lifestyles that meets in North Canterbury, New Zealand, for five or six days over the New Year
- (3) At the large scale is Alcoholics Anonymous (AA) consisting of many small local groups coordinated into a global network without an overarching control structure.

2. Perspectives on Acephalous Organizations from Systems Theory

There are similarities between acephalous operation and self-organization [13–15]. In self-organizing systems the parts connect and interact in coherent ways without any central control, often leading to emergent outcomes. They are able to adapt quickly to changing circumstances without a cumbersome centralized infrastructure. Maturana and Varela's concept of autopoiesis [16,17] is also relevant. They describe organisms that self-produce by maintaining a flow of resources (e.g., food) from the outside environment. Luhmann extended the concept of autopoiesis to organizations where communication rather than resources forms the dissipative flow [18]. The concept of structural coupling describes how autopoietic systems become entangled with the environment and other organisms through recursive feedback loops. These concepts can be seen in the three case studies below as the organizations self-produce through the recursive interactions between participants. Without a structured leadership, acephalous organizations are more similar to autopoietic systems in nature. Beer's Viable Systems Model is also relevant [19]. Instead of people having set roles within Beer's five sub-systems, people are able to flow seamlessly between sub-systems as necessary, such that all necessary tasks are still undertaken.

3. A Causal Layered Analysis Comparing Traditional Structures and Acephalous Structures

Causal Layered Analysis [20,21] provides a means of viewing an organization or situation from four different layers to ensure a multi-perspectival approach. This allows us to compare acephalous operation to more conventional organizational styles. The layers are seen as interpenetrating and interactive. The litany layer is the everyday layer, where there is no questioning the overall structure. At the systemic layer the social structures that hold the organization together are observed. The litany layer can be questioned from the systemic. The worldview layer provides the ideology; the coherent set of ideas or principles from which the systemic layer derives. Then, the worldview itself is informed by the myth/metaphor layer, which provides the guiding metaphors, images and archetypes for the worldview. By comparing conventional structures with acephalous structures at multiple layers, it is easier to observe how fundamentally different an acephalous approach is.

Table 1 below makes it clear that acephalous organizations may in some ways appear similar to other organizations, but they actually operate from a fundamentally different paradigm. People are still seen taking the initiative, but they do not fall into ongoing set roles as noted in the case studies below. At the litany layer the conventional system is very structured and people work within their defined roles, while in the acephalous people are equal and flexible. At the systems layer, lines of authority are clear, defined and controlled. In acephalous organizations techniques are used that ensure inclusion and equality. At the worldview layer, power and control by a few over others dominate the conventional system, while for acephalous organizations the focus is on networks and collaboration. Military metaphors with victors and vanquished [22] dominate conventional organizations, and networks and spirals typify acephalous organizations at the myth/metaphor layer. Being clear of the fundamentally different nature of acephalous organization it is useful to see them in a wider global context.

Table 1. A comparison of acephalous and conventional dominance based hierarchies.

	Conventional Organization	Acephalous Organization
Litany	Bosses and workers, leaders and followers fulfil their roles, paid and rewarded according to role.	Co-operating equally, using acephalous skills, money if any is shared equally
Systemic	CEO, Boards, presidents, authority structures, Lines of authority, Those higher have greater responsibility, greater power and receive greater rewards	Sharing circles, consensus, leadership in the moment, shared responsibility and shared rewards. Holacracy [23] or other techniques are used.
Worldview	Power and control structures, the profit motive often prioritized	Inter-linked, community, networking, collaboration, self-responsibility, unity in diversity, human needs prioritized, tolerance for uncertainty
Myth/metaphor	Pyramid, alpha male, king of the castle, linearity	Circles, spirals, cycles, ant colony or bee hive (While ant colonies and bee hives have queens, they only have a reproductive role and not a controlling role. The control comes from the distributed hive mind), rhizome, networks

4. The Global Context

A growing response to the perceived destructiveness of the dominant hierarchical paradigm [24,25] is in the growth of the peer to peer movement championed by Bauwens [26]. In a peer to peer organization, people interact directly building value for each other without any intermediary controlling structure. Bauwens describes peer production as essentially post-capitalist and post-democratic and promotes community-based, consensus styled collaborative projects. Participation is voluntary and Bauwens describes the leadership as invitational. Constraints come from within rather than being imposed by those in power. Some peer to peer organizations operate more purely, such as Semco [27], work co-operatives [28], intentional communities [29], and many open source software and crowd funding groups [30]. Others have a peer-to-peer structure linking individuals through a central structure. Some of those central structures have lower input such as Linux [31], Wikipedia [32], couch surfing [33], while others are more conventional hierarchies taking advantage of a peer to peer networks for profit like Uber [34] and AirBnB [35].

Peer production is not intended as a replacement for the money economy or democratic processes, but is a means of re-humanizing structures, which are seen as valuing profit over human wellbeing. Bauwens envisions a dynamic relationship between government regulation, private market freedom and autonomous civil society projects. Particularly as digital capabilities increase exponentially [36], Bauwens sees peer production as a butterfly effect [37] that will become widespread and eventually a part of the dominant culture. Acephalous organization too could thus become much more influential. Having said that, it is important to recognize that an acephalous style of organization will not solve all organizational problems. It is important to be practical about how effective acephalous organizations are in real world situation.

5. Strengths and Weaknesses of an Acephalous Structure

There are a number of strengths identified with acephalous organizations. Participants feel a stronger sense of belonging, ownership and commitment because all are equal and can have a real voice as demonstrated by Rosen [38]. Deetz [39] emphasizes the power of people to have their voice in determining the direction of an organization and encourages stakeholder participation, which happens more easily when members are considered as equals. Without fixed structures the organization can adapt more easily to changing circumstances. A wider variety [40] of skills and abilities is tapped from

all those involved rather than just those at the top. The lower levels of a hierarchy, and commonly those at the “coalface”, who are actually in touch with the “on the ground” reality, often do not get heard.

Acephalous groups, such as Al Qaeda and Occupy Wall Street mentioned below, can be very effective at opposing a dominance based hierarchy, because there is no center; the group just reforms in a new shape. On the other hand without distinct roles, personal responsibility can be avoided. If everyone assumes someone else will take the initiative, vital tasks may be missed. The ease of joining and high tolerance of difference can give space for difficult behaviors to manifest. For example, some people at the fringes can end up wielding disproportionate power.

Communication is even more critical in acephalous organizations. In a dominance hierarchy only those in positions of power need full information, but in an acephalous organization anybody who might step forward in the moment needs to be access the information to make an effective decision. Decision can be slow while a consensus is worked through, whereas in a dominance hierarchy a person with authority, if available, can often act quickly and decisively. At the same time, dominance-based hierarchies often have rigid bureaucracies that make changing direction difficult and with many unintended consequences. They become like an ocean liner needing several miles to make a significant change in course. Often acephalous groups can adapt very quickly, because anyone has the authority to act in the moment. This can, however, also mean acephalous organizations can change too often before an idea has had a full chance to develop and cohesion is lost.

Operating in an acephalous framework requires a different mindset and for people more used to a dominance hierarchy the change can be bewildering and confusing. The high level of trust in the group can be abused and vulnerable or shy people can be left unsupported or unintentionally excluded. In deciding whether an acephalous structure might be suitable for a group these strengths and weaknesses need to be considered as discussed, as well the factors discussed next.

6. When Is an Acephalous Structure Viable?

An acephalous structure is not viable for all organizations [41,42]. Many factors such as a coherent guiding vision, effective communication, trust and goodwill are necessary in all organizations, but some factors impact differently on acephalous organizations.

6.1. Flat Interchangeable Skills Base

If tasks require specialized skills and knowledge, it becomes more difficult to maintain the equality of group members. Even if there is no monetary recognition, the expert accrues greater influence over others. When tasks are interchangeable, it is easier to maintain an acephalous structure.

The Mondragon co-operatives in northern Spain [43] struggled with the problem of rewarding those with greater abilities. The first co-operative began in 1956 which multiplied to the point that virtually the whole city became a network of over a hundred co-operatives with a turnover of billions of Euros a year. Initially, nobody earned more than three times anyone else, but found they had to adjust the ratio, even up to one to nine, to attract people with sufficient skills, since outside incomes were so much higher.

6.2. Minimal Critical Tasks

If there are life threatening tasks an acephalous structure is often too slow and unstructured to be effective. An institution like a hospital or an airline has both the need for highly skilled individuals and effective processes to handle situations where human life is at risk. Such organizations need to organize themselves more towards the order end of the order-chaos continuum [44]. Having said that, many other non-critical tasks in such organizations could still be conducted acephalously.

In some circumstances in acephalous organizations lives can be threatened (such as camping accidents at Convergence (discussed below)), but they are rare and standard health and safety steps are generally sufficient to minimize the risk of such events.

6.3. Lower Level of Commitment Required

Many acephalous groups require little of those who participate. To become a member of the couch surfing website, ride sharing or a co-operative bank [45] one merely needs to join, create a password and use the service as little or as much as desired. Digital technologies make many acephalous activities possible. There are of course many acephalous groups such as co-operatives, which require a large commitment from its members. While they certainly can be effective, the more complex the activities undertaken, the harder it is to maintain acephalousness.

7. The Dilemma of Scale

As any group increases in size the infrastructure required to maintain it grows faster than the group size. This can be understood by taking a simplified example. A group with ten members has 100 links between members. If the size of the group is increased to eleven (*i.e.*, a 10% increase) the number of links to be maintained increases to 121 (an increase of 21%). If the group size increases from ten to fourteen, the size increases by 40%, but the links to be managed increase by 96% (see Figure 1). Since the level of social complexity and the infrastructure to run it rises sharply as group size increases, the group must find ways to contain the increased complexity [46]. Introducing an ongoing leadership structure is a very effective way of reducing complexity, so, the larger the scale of an acephalous organization, the more pressure there is to default back to a leadership structure. Acephalous groups therefore operate very differently at different scales to compensate for the different infrastructure needs. The impact of scale will be more apparent in the case studies of three scales.

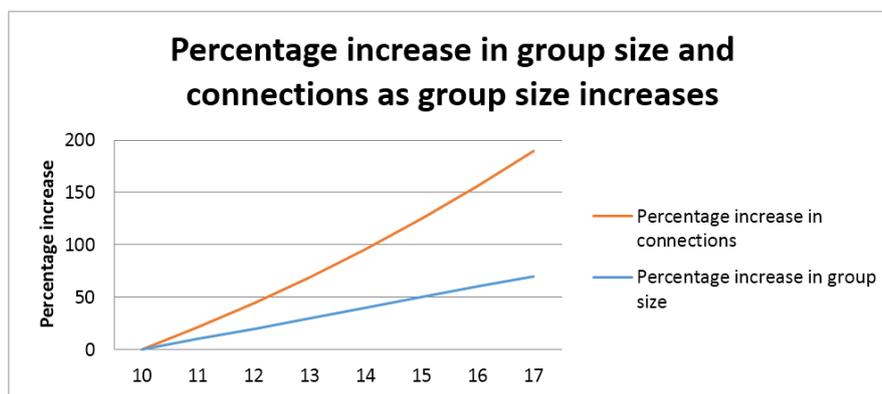


Figure 1. The number of connections between group members increases far quicker than the increase in group size.

8. Case Studies at Three Scales of Acephalous Organization

This section takes three case studies (small, medium and large) to explore the impact of scale on how the groups organize themselves. There is no set number of members for the three scales, but a convenient guideline is small—up to 150, medium 150 to 1000, and large over 1000. Dunbar and Hill [47] found the maximum number of relationships we have the cognitive capacity to cope with is around 150 and often organization around that number tend to split into two groups.

8.1. Small Scale Acephalous Organizations

Small-scale acephalous groups have little infrastructure and tend to run more informally. Everyone knows each other and their reputation [48]. Any difficulties can usually be resolved face to face. These groups including book clubs, support groups, small co-operatives are numerous and may well not even consider themselves as acephalous.

The Tui Bee Balm Co-operative [49] started as a home industry within the Tui Community [50] in Wainui Bay, Nelson, New Zealand. The Tui community has around 60 residents and has been

operating in an acephalous manner for just over thirty years. The Tui Bee Balm Co-operative provides employment for twelve people involved in the community. It has developed a range of organic balms sold in New Zealand and internationally with a licensed producer and seller based in London for the European market. The workers (*kaimahi*) meet monthly to discuss operational plans. Even though there are many co-operatives at this level, which maintain complete equality, the Bee Balm co-operative have a co-coordinator and management group of four. The coordinator is responsible to the other *kaimahi* and takes direction from them at the monthly meeting. A co-operative member stated, “just to keep the business functioning particularly in this sort of current culture in the world out there you have to have some sort of leading, but any decisions that are made like new products or new recipe changes all go through co-op meetings and we strive to get consensus”. All workers are paid a flat rate, but the coordinator is paid a higher rate for ten of the 30 hours worked.

Small groups like this are very flexible and can adapt very quickly and easily to changing circumstance. A disadvantage is that any personality differences between any two members become a significant issue for the whole group, whereas in larger groups such issues have a smaller impact on the whole organization.

8.2. Medium Scale Acephalous Groups

At the medium scale infrastructural issues become more significant and other ways to reduce complexity must be sought. Examples within the medium scale are flash mobs, larger work co-operatives, short-term gatherings, and terrorist groups like Al Qaeda. Organizations like Al Qaeda [51] have high autonomy at the local level, but the still have a clear top-down chain of command. Groups operating for shorter time periods or requiring a low level of input from participants reduce complexity and make acephalous operation more viable.

The case study for the medium scale is Convergence, which has organized a five or six day annual gathering of 300–500 people interested in alternative lifestyles over the New Year based in North Canterbury, New Zealand for thirty years [42]. Convergence has evolved an acephalous structure over the years. One experienced participant noted that, “we had to learn to step back even though we knew what was being suggested had been tried before and offer people that chance to try and learn. It was hard sometimes”.

A survey was conducted by the author of 142 participants of the 2013/2014 gathering. This revealed that decision-making was more complex than initially assumed. Resolving issues as a whole group is too cumbersome and there is also no mechanism for democratic elections. The different ways identified are:

- (1) Small matters are acted on by the individual who recognizes the issue they contact someone with the necessary skills
- (2) Experienced participants undertake work for which there is an established precedent. Convergence has developed to the point that no budget is set. People know what is needed and just buy it. They also try to pre-empt any potential problems they notice
- (3) Sub-groups such as the kitchen generally operate with a high degree of autonomy and are themselves acephalous. Consensus is more workable at this scale
- (4) A significant issue is generally resolved by forming a small temporary group of experienced participants meeting with those involved and their support people should they wish
- (5) Sharing circles, originally established as a place to explore personal development have evolved into a place where issues about Convergence can be discussed
- (6) Facebook and email have become used more often to discuss issues, especially since the participants live through the South Island and even in the North Island.

8.3. Large Scale Acephalous Groups

There are a variety of examples of large scale groups. Large scale digitally connected groups generally require minimal commitment and are more focused on providing a coordinated service, such as crowd funding [30], Bitcoin [52] and couch surfing [33]. Some, such as Wikipedia [32] or Linux [53], allow anyone to contribute. Significant contributors clearly see themselves as a community, however there is a veto maintained by those at the top.

Other large scale groups have political aims, such as the Arab Spring [54] or Occupy Wall Street [55]. While these political groups can be powerful at opposing existing structures because they do not operate as “expected”, they are far less effective at creating alternative solutions. There are a number of gatherings like Convergence, which would come under the large scale such as Confest [56], Burning Man [57], and the Rainbow gathering [58].

The large scale case study is of Alcoholics Anonymous, which is a unique long standing organization with a high level of acephalous organization [59]. It was established by Bill Wilson and Dr. Bob Smith in 1935. Bill Wilson described the organization as a “benign anarchy”. In spite of being a global organization of 1.8 million people, there is no top-level organization and each local group is autonomous. The international structures (General Services Office (GSO)) provide information and support to the local groups; as well as the international GSO there are GSOs in each country that are themselves autonomous.

At the regional level people members are voted into positions and held for a maximum of two years. Most funding comes from the publications sales. The book “Alcoholics Anonymous comes of age” [60] tells how each local group came to be autonomous: The groups said to us, “We like what you are doing. Sometimes your suggestions and advice are good. But whether we take you or leave you alone is going to be *our* decision. Out in the groups, we are going to run our own show. We are not going to have a personal government in New York, or anywhere else. Services, yes. But government, no”.

AA is based on a set of twelve traditions to help guide the local groups in their operation. Several of the traditions focus on ensuring the AA remains firmly on assisting alcoholics who wish to stop drinking. One outlines the spiritual beliefs in a God and several cover the non-professional nature of AA and how it relates to external organizations. There is a tradition about anonymity and the others are about the autonomy of local groups and their self-sufficiency.

9. Conclusions

In a world of increasing inequality and structural violence, there is a great need for more humane ways for us to organize ourselves. Acephalous organization and the wider peer-to-peer movement provide a viable alternative in many circumstances. The first challenge is to promote acephalous organization, so that it is at least considered as an alternative when new organizations are established. Acephalous organizational structures have strengths and weaknesses, but there are many examples of long-standing, successful acephalous organizations, whose experiences would assist any other organizations wishing to try and use an acephalous structure or use some of the principles of acephalous operation. The second challenge therefore, is to collect more and more examples of successful acephalous organizations and develop a skills base of the capacities required to operate within a range of different acephalous environments. If these challenges can be met, acephalous and peer-to-peer organizations have the potential to play a key role in the development of alternative approaches to challenge the dominance based-hierarchies of today.

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