# Natural Selection, Kinship, and Justice in Plato's Republic

What plato refers to as justice deeply parallels the cooperation of parts visible in a successful biological organism. This paper will illustrate and explore the implications of the similarity of ideas present in the republic and modern biology.

### The Perfect Organism is Perfectly Just

In brief, plato's justice is a quality of a thing where each component part of that thing does what it is most suited for to benefit the whole. This is true both in the city, and in the soul, as Socrates states:

"this city was just because each of the three classes in it minds its own business [...] for each of us too, the one within whom each of the parts minds its own business will be just and mind his own business." (441e)

For Socrates and Plato, justice is something which exists in the same way for both individuals and the cities which are made up by them. Additionally, in order for the city to be just, or presumably any system composed of smaller parts, the individual constituents must recursively be just as well. Plato speaks to the parts of an individual's soul for much of the republic, but the same concept holds for bodies too.

Living things consist of societies of individual parts which cooperate in a way that Plato would surely characterize as just. These individual parts as well are recursively composed of specialized cooperative parts all the way down to whatever the most fundamental parts of an organism are, where each of these parts gain a mutualistic benefit from cooperating to form the whole. One might ask: what could possibly be to the mutualistic benefit of the lower level parts like the particles or vibrating strings purported to be essential building blocks for both human individuals and cities? A question of thermodynamics need not be answered in a philosophy paper – suffice it to say that by cooperating to contribute to the optimal functioning of a greater whole, these component parts somehow gain a mutualistic benefit towards the satisfaction of their own preferences. If plato could see the intraorganismal cooperation of bodies with modern vision, and then as well understand that these systems were under an infinite process of evolutionary refinement, he might faint from excitement.

Plato acknowledged the connection of his definition of justice to the workings of bodies (444e), and thus I think it certain Plato would consent that what he characterizes as the form of the good which illuminates justice must be analogous to the form that illuminates organism-being – the form of life. What is the form of life? By way of the natural selection process, it is clear that organism-being constantly strives for something, as the evolutionary iteration of critters hones their shape towards some goal. It is a cycle of birth, death, and rebirth with a preference always for the fittest. Intuitively, this cycle has an ultimate end. One can roughly imagine the perfect organism which the process strives to achieve: a single creature which spans everything, and whose omnipotent tendrils manipulate the very fabric of the material (and immaterial) world to optimize its own stability and permanence. And necessarily

for its excellent survivability the ideal organism embodies justice. It is mastered by its own perfect intellect. As would be expected by the parallel of justice and organism-being, the perfect organism is good. Evolutionary telos is the form of life, and it looks a great deal like God.

# Micro - Macro and the Biology Analogy

One curious aspect of the republic is the reasoning that Socrates had for bringing up the city at all, if his goal was simply to describe justice. Socrates explains himself, seeming to describe this choice as a explanatorily helpful analogy, "First we'll investigate what justice is like in the cities. Then, we'll also go on to consider it in individuals, considering the likeness of the bigger in the ideas of the littler" (369a). This, as a pedagogical strategy for the explanation of justice, interestingly parallels the methods used in contemporary education of biology. But, additionally, notice the specific use of the words bigger and littler as though the substantial difference between the city and individual is only size. Plato's city analogy takes a stance on the intrinsic similarity of cities, the souls of people, and implicitly: organisms.

Socrates strategy for explaining justice on the level of the individual is to demonstrate first how the concept works in a more familiar scale than one's own mind. This technique works, and finds modern use in elementary biology education. To explain the physiology of an organism to a student, often each organ is analogized to a part of a human society. For instance, the immune system is a military in the body, while the endocrine system is a kind of highway for messengers to travel along, and the colon takes out the garbage. The reason this strategy is successful is that the mutualistic cooperative success of multiple disparate parts occurs in a fundamentally similar way for both cities and organisms. So justice in the city looks not only the same as justice in the soul, but also the body as well, or any organism.

However, for both elementary school educators and Socrates this analogy becomes a double edged sword. If organisms function like cities, and souls function like cities, then the reverse is true as well. Cities function like organisms. Souls also function like organisms. All three of these things respond to what Plato calls justice in the same way, so why not apply a general term to things of this class? I think it sufficient to refer to cities, souls and organisms all as living things, where the most just examples of each of these can be said to participate the most in the form of life.

Such an equivalence between city, organism, and soul agrees nicely with Nadaffs account. Among other things, Naddaf claims that pre-socratic philosophers hold the same natural processes to occur in all levels of being including politogony. For example, Nadaff says that the numbers in Anaximander's cosmogonical model reflect the political structure of his time (Naddaf 7). If true, this would make pre-socratic philosophy an obvious intellectual context from which Plato could have drawn on for inspiration for his illustration of the fundamental sameness of organisms, cities, and souls.

Although the similarity between organism and city seems intuitive, one wrinkle emerges from this equivalence between the organism and soul. As mentioned previously, the biological

organism has a structure that can be split into many component parts, each of which can be split further all the way down perhaps to some kind of fundamental arrangement of corpuscles. In an optimally functional organism, all of these parts will be performing the task within the organism which they are suited to. So shall we say the same of the soul? Almost. Within an optimally functional soul – a just soul – all the parts must be doing the task for which they are suited, however the component parts of the soul are less easily subdivided. The intellect is simply one part of the soul, but as shown in the line analogy (510ab), and as may seem reasonable through one's own human experience: the space of things which can be intellected is capable of infinite splitting, with no fundamental corpuscle to serve as handbrake to the division. If the identity of soul and city and organism holds true, then either we must rid ourselves of these inelegant corpuscles and recognize that reality is turtles all the way down, or we must push back against the argument of the line analogy and recognize that intellect and souls are finite.

#### Glaucon's Challenge and Game Theory

As an empirical fact, humans often are nice to one another even in cases where they seem to directly counter their own self interests. Glaucon would say that this apparent altruism arises from being just that: apparent. The appearance of altruism, and the encouraging of it in others leads to individual benefit, while actual altruism and justice is only performed by suckers who are not looking out for their own best interest effectively (362c). This is his most convincing argument to support the challenge that injustice is naturally good for the individual.

Socrates initially responds to this challenge by defining Justice in a way which mirrors the biological definition of mutualism. The constituents of Socrates' cooperative enclave do the work which is suited for them and appropriately exchange with other specialist constituents because it is in each of their own best interests. The variety of specialization allowed in a collective like this allows for the individuals within to satisfy their desires more easily and fully than if they were looking out only for themselves (370dc).

The mutualistic strategy and greedy strategy can both be successful. This dialectic can be read as not an argument per se, but rather a weighing of two potentially successful game theory strategies in the search for the behavior of the superior organism. This is natural selection mediated by speech, and Socrates' speech selects for organisms which collaborate, specialize, and contribute to an organism greater than them. Coincidentally this strategy includes selective breeding, as in the case of the guardians.

### The Beauty of the Form of Life

By Socrates' logic, one plain reason that justice is good is the benefit of mutualism for an individual's desires. But another path through the forest relies on only the beauty of justice. Beauty is good. If a flower is more beautiful than a rock, then the form of life is more beautiful than its absence. The quality of organism-being illuminated by the form of life is justice. Thus, justice is good by way of the beauty it produces.

#### The Pleasure of Kinship and The Beauty of Kinship

To exist under the wing of another, to take selfishly take what is given – this is pleasant. To harbor little birds of your own underneath a strong wing; to defend, encourage, and make flourish – this is also pleasant. Appropriate giving and taking constitute the familial relation. These exchanges lead, generally, to the success of a kin group, and thus they emerge as evolutionarily mandated pleasures.

To appreciate beauty brings pleasure as well, although not at the strict demand of an evolutionary imperative. Incidentally, kinship has beauty as well as pleasure. This is because kinship, being an evolutionarily successful strategy, participates in the form of life. Thus, engagement in kinship is good, because it creates beauty. In theory, one can be a lover of kinship in two ways. One can take raw pleasure in the kinship while simultaneously recognizing and appreciating that they exist as a part of a greater ecological whole.

## The Dissonance of the Beauty and the Pleasure of Kinship

If one takes part in their family unit for both simple pleasure and for the appreciation of the beauty they believe themselves to help propagate, then they have greedily taken too much. Their part in the advancement of organismal justice is half-baked. By both relishing the pleasure of kinship, and also believing it to be a noble and beautiful thing that they are doing, it reveals either a lack of passion towards the form of life, or a lack of perseverance against the simple pleasures and pains. It is an attempt at finding a middle ground between Glaucon's challenge and Socrates' position. The reason for the incompatibility of pleasure with the good of kinship is the existence of a way to participate in the form of life more effectively than to loosely follow hard-coded kinship impulses – impulses which are only a locally optimal and outdated solution to participate in the form of life. A goal of achieving evolutionary telos will be achieved more easily when the societal organism is prioritized over the individual. According to Plato, when an individual is most just and therefore most effectively participating in the good, this is when the individual most benefits the society of which they are a part(441e). Since engaging in kinship does not optimally benefit the greater society, it cannot not the most good option for an individual.

In other words, to fully lean into the beauty of the form of life, one must become a utilitarian or something like it, but this invalidates them from harvesting the simple pleasure of narrow kinship. While the family unit somewhat embodies the just intraorganismal cooperation, a better way to participate in the form of life than engaging in kinship is by subscribing to a kind of communist or utilitarian society where kinship is universal, such as was artificially induced in the highly just guardian family where all are made brothers and sisters (461e).

When engaging in kinship is directed unexclusively like as in the guardian family, then this redirected pleasure of kinship effectively participates in the form of life, and serves to optimally create beauty. But of course, this does seem less pleasurable than the more traditional

kinship alternative. Plato's guardians willingly relinquish exclusive ownership over their biological children, so their purpose must be of a higher nature than simple pleasure. They are in it for the beauty.

The Irrelevance of Nomos Phusis to the Argument of the Republic

The dissonance between the pleasure of kinship and the beauty of kinship presents a particularly interesting narrow case of the Nomos Phusis controversy. To follow one's impulses and nepotize with a clan is natural. And, to be driven in all of one's actions by the striving towards an evolutionary telos seems to be an arbitrary law which conflicts with natural impulse. However this scenario easily flips on its head. Evolutionary telos and the form of life *is nature*, and to obey anything other than this end is to follow arbitrary norms which do not most directly reflect the goals of nature, even if the norm is born from nature itself.

It must be acknowledged that the Nomos Phusis divide wraps itself easily in either direction around any two-sided debate. More often than not, and certainly in the case of the Republic, Nomos Phusis functions as a proxy for a much more fundamental human tension: that between beauty and pleasure. When Socrates responds to Glaucon's argument in favor of justice, it might be said he is supporting nomos over phusis, or vice versa. In reality, neither Socrates or Glaucon worries about these amorphous concepts. The form of life in which justice participates is beautiful. Pleasure is, well, pleasurable. Socrates prefers beauty.

#### **Works Cited**

Naddaf, Gerard. The Greek Concept of Nature

Plato. Republic.

Plato and Darwinius Dialogue

Plato, and Darwinius arrive at the Thesmophoria festival.

Darwinius: "Plato, oh best of men! What great coincidence it is to run into you, for I have some important questions for you."

Plato: "They must important questions indeed if they emerged from the clever mind of Darwinius! Pray tell, of what topic do your questions concern?"

Darwinius: "The topic of life of course! I had just finished reading your wonderful book about justice and the city and the soul; it is a fine read, but I feel it did not touch on the topic of life to my satisfaction."

Plato: "Darwinius, you lover of life, how could anything touch on this topic to your satisfaction? Go ahead and present your queries so we can leave discussion of boring literature and attend to the lively festivities at hand."

Darwinius: "Very well you demonic man! First, please see if my understanding of the book is correct. Would you allow me to describe the just city as a collection of individuals whose relations and tasks are determined by their function in benefiting the whole city?"

Plato: "I would allow it."

Darwinius: "And would I be correct in saying of the just soul that it is of a collection of parts whose relations and tasks are determined by their function in benefiting the whole soul?" Plato: "This seems correct in my view."

Darwinius: "Then my good man, would you also say for a thing to be just in general, that it must be composed of multiple interdependent elements whose relations and tasks are determined by their function in the whole."

Plato: "It could be no other way."

Darwinius: "With this in mind, how would you describe the concept of an organism."

Plato: "I suppose I would describe it as a prime example of a just thing. Since, within an organism there are multiple interdependent elements whose relations and tasks are determined by their function in the whole."

Darwinius: "And, would you agree that some organisms are more or less just than others, and that those which are most just will also be most fit in comparison to their peers, and they will be healthy and will often win in battle."

Plato: "Oh you demonic man! Yes, just like the way in which the more just cities are more likely to win in battle so would be the case for organisms. I see the way which you are taking this discussion; you wish to say that the most just organisms will, having won the most battles, be able to reproduce the most, and as such over generations the organisms which become most prevalent will be the most just ones."

Darwinius: "You blessed man, that is exactly what I wish to say! But on top of that I want to ask one more question."

Plato: "Have you not exhausted this old man with difficult questions already? Let us hear this final question."

Darwinius: "The question is this: supposing that every generation, the organisms become more and more just would you admit that they are approaching slowly the perfect justice?" Plato: "Yes Darwinius, after an infinity of generations the resulting organism will be have perfect justice, and it will be equivalent to the ideal good of which I spoke in the book, that shines down on the physical world in the form of justice. But make no mistake Darwinius, the organisms will never actually achieve the form of life in the physical world, since the infinite amount of time which would be required for this can itself only exist as an ideal in the world of forms."

Darwinius: "Aha! These are exactly the words which I wished to hear spoken by your blessed lips! I will bother you and your brother no longer with such demonic questions; let us quit this nonsense and attend to the festivities."