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ARISTOTLE'S CHILD: FORMATION THROUGH GENESIS, OIKOS, AND POLIS

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Introduction

Aristotle has many different things to say about children and childhood in his writings. For example, begetting offspring is one of the basic efforts in which all animals, including human animals, are engaged. (History of Animals (HA) 589a5; 596b21; Nicomachean Ethics (NE) 1162a18) Human children are born singly for the most part but, he notes, frequently twins are born; the most babies resulting from one birth is five which "has already been seen to happen in several cases." (HA 584b33-5) He observes that immediately after birth infants cry out and raise their hands to their mouths, but he adds that for forty days afterward they neither laugh nor cry while awake (although they might do both while asleep). (HA 587a28-b9) On his view, parents and children are philo, friends, but unequal ones. Parents are superior, but it is they who are lovingly attached to their children as other selves. Children, on the other hand, love their parents only after some time, when they have acquired understanding (NE VIII 1161b26). He speaks, too, of the affection children typically have for siblings and friends (NE VIII.12 1162a10-15), but he writes that children are incapable of eudaimonia (NE I.9 1100a2) and of choice. (NE III.2 1111b7) He insists they be shielded from morally corrupting influences (Politics (Pol) VII.15 1136b1-36), and believes they should be exposed to cold for its beneficial effects (Pol 1335b14). He discusses children's pastimes, and the appropriate ages for their training at home and their public schooling (Pol VII.15 1-11), among many other themes.

What are we to make of these fascinating but disparate observations? In some, Aristotle generalizes about the generative origins of offspring, and in others he makes direct, empirical statements about children's behavior, even in unexpected settings.¹ He gives detailed, scientific explanations of the child's origins, and historically documents unusual occurrences of his time regarding children, such as the birth of quintuplets. He speculates about the relationship between parents and their children, comments on the feelings children have for one another and their likes and dislikes, and makes practical recommendations about their up-bringing and education.

¹ Normally in Aristotle's time a man would not be present during the mother's labor and delivery. The pregnant woman would be attended by women of her household and a mid-wife. In complicated deliveries a doctor might have been called. The father would not be on hand. (Robert Garland. The Greek Way of Life. From Conception to Old Age. Ithaca: Cornell University Press, 1990, pp.61-66) Aristotle speaks in some detail, however, of the skill required of the nurse and mid-wife in delivery (HA 587a9-24); it might be supposed on the basis of this passage and those where he describes the behavior of the newborn that he himself had witnessed births.

Aristotle's corpus does not include a single, sustained logos on the human child.² In fact, some of the statements sampled here are occasional remarks or digressions from other, major themes. Therefore we might wonder, first, whether Aristotle has much philosophical interest in children and, second, whether he has a comprehensive notion of children's nature that integrates his various observations about and directions regarding children.

The first question can be given an initial answer by noting that he refers to a treatise of his on child-rearing, unfortunately not extant. (Pol 1335b5) Many treatises refer to children in one way or another, and several contain discussions about or applicable to a study of the child. These later are notably Generation of Animals (GA), Nichomachean Ethics (NE) and Politics (Pol) (and shorter but illuminating discussions are to be found in History of Animals and Eudemean Ethics).³ This listing of works, however, indicates a potentially serious methodological obstacle to the integration of Aristotle's views regarding the child. The list reveals the two main loci of his observations and reflections regarding children to be the biological treatises and the ethical and political works. Biology on the one hand and ethics and politics on the other represent two distinct kinds of knowledge for him, namely theoretical and practical.⁴ Thus his

² In this respect, the Hippocratic corpus stands in contrast to Aristotle's in containing a work titled, "On the Nature of the Child (pais)."
(Hippocratic Writings, G.E.R. Lloyd, editor. NY: Penguin Books, 1983 and Oeuvres Completes D'Hippocrate, VII, E. Littré, editor. Amsterdam: Hakkert, 1962.) Note, however, that the Hippocratic work concerns fetal development rather than the child's post-natal life.

Just as there is no single treatise by Aristotle on the child, there is none on human nature or the human being as such. Don Asselin's Human Nature and Eudaimonia in Aristotle (NY: Peter Lang, 1989) discusses the absence in the corpus of such terms as anthropos kata physis, eidos anthropou, and so forth. See "Introduction," especially pp. 4-5.

³ H. Bonitz, Index Aristotelicus s.v. pais, teknos and neos. T.W. Organ, An Index to Aristotle. In English Translation. (Princeton: Princeton University Press, 1949) provides a less complete listing for "children."

In addition to the treatises mentioned which present developed discussions of matters pertaining to children, remarks about children are found, for example, in Physics 248a1, and in spurious or contested works: On Colors 797b24-29 and 798a30, On Things Heard 801b5, 803b19, and in Problemata 872a3-8, 895a14, 902a5-35, 902b16-19. Aristotle sometimes uses the example of a parent and child, as in Meta 1013a32, 1018b22, and in Rhetoric 1401a1 and 1401a35-37, to illustrate a point he is making on some subject other than children per se.

⁴ The proper light in which to view the biological sciences is a matter of some controversy. In Meta VI.1 Aristotle explains that the natural sciences, of which biology would be a part, are theoretical rather than productive or practical sciences. But in PA 640a1-2 he says that demonstration and necessity differ in the natural and theoretical sciences, indicating some fundamental distinction between the two. (See too Phys II.2 and 9; also D.M. Balme, "Aristotle: PA I.2-3: Argument and Text," Proceedings of the Cambridge Philological Society 196: 12-21, 1970). Against Balme's proposal, Marjorie Grene favors a more traditional classification of the biological sciences as theoretical, but as having a secondary status within the theoretical ("About the Division of the Sciences," in Aristotle on the Nature of Living Things, Allan Gotthelf, editor. Pittsburgh, PA: Mathesis Publications, Inc., 1985, pp. 9-13) Balme's reading recommends itself as giving a greater emphasis to the empirical method in biology.

observations about children fall within two of his three broad classes of knowledge (the three being the theoretical, practical and productive sciences).⁵ Whether or not Aristotle has a comprehensive account of the child, then, concerns the coordination of these domains of knowledge and the kinds of characterizations proper to each of them. But questions arise about that coordination from Aristotle's often-stated principle of the division and autonomy of the sciences.⁶ According to this principle, the theoretical, practical and productive sciences are distinguished from each other by their differing subject matter, aims, methods of inquiry, and standards of precision. Aristotle makes it plain that the sciences are irreducible and non-transferable.⁷ Not only are the sciences separate but they are ordered hierarchically. Thus, achieving a comprehensive account of the child by means of an interdisciplinary blending of the distinct inquiries within which he speaks of children is precluded by a fundamental principle of his system. With the prohibition against mixing the disciplines, the second of our initial question, i.e. does Aristotle have a fully comprehensive view of the child, should perhaps be changed to: can Aristotle offer such a view? The answer would appear to be "no."

Although Aristotle does not fully and explicitly systematize his conception of children in a single treatise or a single science, we can reconstruct his view and show its coherent pattern. The method of this reconstruction is not, however, interdisciplinary. Rather, full respect for disciplinary boundaries and hierarchy is maintained by recognizing that the biological, ethical and political works make available a composite concept of the child. That is, for Aristotle, the human child must be regarded as a substance that comes to be, grows and develops to completion as a human adult. Within this progression there are distinct

⁵ The remarks regarding children in the Rhetoric and Poetics, works of the productive science, are incidental and few. Aristotle does not seem to consider children "productively."

⁶ See Topics 145a15, Meta 1025b1-14, Phys II.2; also AnPo 76a23-30, 84b14-18, 89b21-90a34; GA 748a7-12; NE VI.

⁷ Aristotle's separation of the sciences has received renewed attention - and defense - recently in response to Martha Nussbaum's interpretation of De Motu Animalium (MA). (Nussbaum, M.C. Aristotle's De Motu Animalium: Text with Translation, Commentary and Interpretive Essays. Princeton: Princeton University Press, 1978.). According to Nussbaum, in MA Aristotle revises what she takes to be his early, "separation" position, expressed in the Organon, in favor of an interdisciplinary approach, in this case one which would blend cosmology and biology (Nussbaum, p. 109, 113; see also Nussbaum, M.C. The Fragility of Goodness. NY: Cambridge University Press, 1986, Chap. 9). Her interpretation does not challenge the basic division of theoretical, practical and productive sciences, but a revision even of the departmental subdivisions within these would perhaps call for a reinterpretation of the strict division of the three major sciences. On her reading, Aristotle opens the way in MA for ways in which the sciences legitimately can mix with one another and indeed depend on one another. Nussbaum's claim that Aristotle offers a new interdisciplinary directive has been challenged: by J. Kung, "Aristotle's De Motu Animalium and the Separability of the Sciences." J. History of Philosophy 20:65-76, 1982; D. Balme, Review of M.C. Nussbaum, Aristotle's De Motu Animalium, Journal of the History of Philosophy 20:91-95, 1982; and in passing by H. Lang, "Why Fire Goes Up: An Elementary Problem in Aristotle's Physics." Rev. Meta.38: 69-106, 1984. Nussbaum herself is well aware of the pervasiveness of the separation thesis in Aristotle's work, and she discusses it, Aristotle's De Motu Animalium, pp. 109-113.

phases, each with its own telos and investigated by a distinct science. The unity of the child and its composite concept, then, relies on (a) a defining feature of the child common to these phases and their treatments in GA, NE, and Pol; (b) an ordered linking of the phases and different treatments; and (c) an explanatory structure of actuality and potentiality brought to bear in the biology, ethics and politics. The common defining feature is that the child is "unfinished" relative to a telos. In the biology, the child is viewed as unfinished in his or her growth as a human animal;⁸ in the ethics, unfinished in the training in virtue; in the politics, unfinished in the education for adult life as a responsible citizen.⁹ We will examine each of these in greater detail below. But not only do Aristotle's discussions rely on this common feature of being unfinished, the developmental phases he discusses build on one another and can be seen to overlay one on the other, or to stack, forming a series of linked teloi. Thus, the ethical formation undertaken in the oikos, the "family" or "household," is appropriate only for a child who has gone through and completed the process of early human growth and development described in the biology; political formation, in turn, is appropriate only for a child for whom ethical formation in the oikos has begun.¹⁰ Each is a grounding prerequisite for the next.¹¹ Furthermore, Aristotle's explanation of the child's transformation and movement from unfinished to

⁸ Regarding Aristotle's assumptions about the sex of the child under discussion, Mark Golden writes, "Pais is a common Greek word for both child and young person, male and female." "Pais, Child and Slave." L'Antiquite classique 54:91-104, 1985.

⁹ The fetation as finished or complete near the end of pregnancy, GA 776a31-776b3, with the clear implication that earlier it is unfinished; the child as having all the parts of a human soul but in an incomplete or unfinished way, Pol 1260a12-14; the child as incomplete with respect to virtue, Pol 1260a32; and the child as incomplete with respect to citizenship, Pol 1278a3-6.

¹⁰ The child, then, is always human. In "The Meaning of Bios in Aristotle's Ethics and Politics," (Ancient Philosophy 9:15, 1989), David Keyt offers the suggestion that different stages of human life correspond for Aristotle with the scala natura. Thus, "a foetus lives the life of a plant, a child lives the life of a lower animal." (p. 19) Such analogies can be derived, but it is clear, I believe, that they are meant only analogically and not ontologically. Aristotle does not offer a "recapitulation" theory of development, according to which organisms repeat and eventually arise from lower forms of life; he rejects the evolutionary model according to which ontogeny repeats phylogeny. Indeed, he rejects attempts to explain unity and complexity from the nature of the parts or lower stages alone. Keyt's aim in his discussion is to establish an ethical point about bios as a way of life, i.e. to take up a question that arises in NE regarding the best way of life. He acknowledges the distinction between bios and zoe, but his expression here perhaps inadvertently suggests, incorrectly, an ontological transformation in the child's nature over the developmental course. The risk of confusion in this case is a reminder of the significance of Aristotle's division of the sciences.

¹¹ There are particular models for comparison with my proposal here found in both theoretical and practical works. In the tripartite psyche of De Anima the broad-based and widely-shared nutritive soul has a distinct task that can also be seen to serve the higher psychic function of sensation, which in turn is linked to the higher reason. In the progress of social units Aristotle describes in the Politics the aims ascend from obtaining the bare necessities of life to virtue and freedom (i.e. the good life). (Pol. I.2, and see Mary Nichols' insightful discussion in Citizens and Statesmen. A Study of Aristotle's Politics. Savage, MD: Rowman

complete, both overall and within each of its phases, consistently applies the concepts of actuality and potentiality in such a way that the child's potential being - as a human animal, as ethical and as political - resides in a prior actuality external to it. Thus, the linkage is very strong and close between cause and effect. In generation the male and female parents are the prior actualities who possess potentialities for the offspring to come to be. In ethical formation in the oikos, again the parents are themselves actualities, ethically finished, in whose activities in relation to the child reside the potentialities to bring the child to acceptable ethical completion. In political formation, the polis and its lawgiver and schools are the actualities prior to the child that hold the potentialities for the child to become a cultivated participant in the public, political world.¹² It is by means of this composition, that is, through phases studied by various sciences among which Aristotle establishes connections and employs common explanatory schemes, that his conception of the child emerges.¹³ At the same time, though, each science maintains its own integrity through its own telos and distinctive treatment of it. Indeed, because the phases represent different types of change (that is, substantial change in the biology, alteration in the ethics and politics), they require different types of explanation, a requirement that might be obscured by interdisciplinary mixing.

& Littlefield Publishers, 1992, Chap. 1.)

¹² As Karl Reinhardt notes in his work on Sophocles, for the Greeks the three components of human existence - and one's identity - answer the questions: "whence," "where," and "with whom," that is, they concern one's origin, dwelling place, and friends. (Karl Reinhardt, Sophocles. NY: Harper & Row, 1979, p. 109) Aristotle's biological, ethical and political discussions of the child can be viewed as conforming to the Greek notion of identification through origin, dwelling place and friends, but with the important proviso that for him specifying the telos in each case is crucial.

¹³ We might note, too, that this concept of the child as unfinished in relation to formative causes provides the basic justification for retaining the biological works, particularly GA, in a study of Aristotle's child. One option for solving the difficulty regarding the division of the sciences might seem to be to drop or at least segregate the biological treatises as not concerned with the child proper, but only with the fetation (kuema). This option might recommend itself particularly if one assumes that the child comes into being or originates as a human child at birth. (S.C. Humphreys in her Introduction to The Family, Women and Death, Routledge, 1983, voices the warning about importing common assumption from our own time into the study of the ancient world.) That the child comes to be at birth was not, however, Aristotle's view, as will be shown. The vocabulary of GA and the other biological treatises sometimes includes pais and teknon, standard Greek words for "child;" this is one kind of evidence that for him the child has his or her beginnings prior to birth and so shows the need to retain the biological works in a study of Aristotle's conception of the child. Note that Hippocrates, too, uses pais, "child," to refer to the entity prior to birth, as in the title of his work on generation, "On the Nature of the Child," (op. cit.). Thus, that the child has his or her beginnings prior to birth was not a view unique to Aristotle. In addition, various of Aristotle's comments about the child's coming-to-be show that in his view the child "begins" prior to birth, within the female. (e.g. HA 581a7-9) And in GA Aristotle most commonly uses the term kuema, "embryo" or "fetus" or, as Peck renders it, "fetation" to refer to the entity that is informed but unfinished in various ways, which is consistent with the conceptual consistency to be established here, namely, that of the child's unfinished, relational nature across the biology, ethics and politics, to be grasped in terms of Aristotle's diversified yet linked teleological scheme and the model of form and matter, act and potential.

We begin, then, to examine Aristotle's child, first in the in biology (GA and HA), then in the ethics (NE), and then the politics (Pol) and to ask how he gives a comprehensive account which preserves the child's unity while keeping the sciences separate.¹⁴

I. Biology - Formation Through Genesis

We turn first to the inquiry into the child and its coming to be in Generation of Animals (GA). Human beings are among the creatures whose origins and development he studies in GA. Genesis in the title of the work (and occurring frequently in the text) is a change from the non-existence to the existence of an individual living substance (as compared to techne which produces an inanimate object. See Physics II.1) Of fundamental interest to him is how the animal comes to be as what it is. That is, there is an evident order and stability in the identity of the new entity that comes to be. Genesis is the regular and non-arbitrary arising of some new substance. Rendering genesis as "formation" highlights this regularity; rendering genesis as "coming-to-be" emphasizes the newness or uniqueness of the entity.¹⁵ In GA, Aristotle investigates the causes of this ordered formation of new living things.

The reasons that explain the coming to be of animal young and the human child are to be sought through the four causes he specifies at the start of the treatise: (1) "that for the sake of which the thing exists, considered as its End," i.e. the final cause; (2) the logos of the thing's essence," i.e. the formal cause; (3) "the matter of the thing," i.e. the material cause; and (4) "that from which comes the principle of the thing's movement," i.e. the moving cause. (GA 715a3-8)¹⁶ In generation, these factors must all be present and available, and they must interact in order for a new substance to arise. The sources of these causal factors (in many cases themselves providing the means and the site of their combination) are the archai of generation, the male and female. (GA 716a5, a14, 716b11, 724b15, 731b18; on the interaction of the causal factors in male

¹⁴ The order in which the treatises are to be examined reflects the course of the child's development and is not meant to imply that the biology functions as a model for Aristotle's other discussions, nor that it takes chronological precedence.

¹⁵ See Peck's note on translation of genesis, p. lxi (Aristotle. Generation of Animals. Peck, Introduction and translation. Boston: Harvard University Press, Loeb Classical Library, 1979).

¹⁶ D.M. Balme, Aristotle, De Partibus Animalium I and De Generatione Animalium I, Translation and Notes (Oxford: Clarendon Press, 1992), p. 127, believes this section (715a 1-18) may be a post-Aristotelian addition. His concern, however, is with its mischaracterization of Parts of Animals (PA). Balme is firm, though, about the basic role of the four causes in the explanatory scheme, not only of GA but in "every explanation of biological phenomenon." Beyond the concern about the reference to PA, however, the causal scheme is fundamental for GA, making it more plausible that the passage at the opening is original rather than a later addendum to the treatise.

and female 731a10-23)¹⁷

For Aristotle, the human child has its origins in the parents. They are the actualities who, as sexually complete, have available in themselves the potentials for the generation of the offspring. Aristotle's explanation of generation bears some resemblance preformationism, a view widely held in his time, according to which the adult parent bears the offspring within itself as a tiny, pre-formed homonculus. But Aristotle rejects preformation as both empirically and theoretically inadequate. Instead, his generative theory (a) includes both male and female parents, unlike preformationism where one parent, often the male, carries the homonculus, and (b) his explanation has the parents carry - or, more precisely, be - the potential for the child's generation, unlike preformation which has no explanation for the child's coming-to-be.¹⁸

Through a detailed study of the generative parts of the bodies of many different animal species (GA I.2-16), Aristotle begins his demonstration that both male and female contribute causally to the generation of offspring and that their contributions differ. The male parent concocts seed from his heated blood; his seed conveys movement or the moving cause. The movement is transmitted to the female parent's contribution, namely, the matter for generation, also a product of heated blood. Thus, two necessary causal factors for a new living substance, motion and matter, are accounted for by the archai, male and female.¹⁹

¹⁷ Sexual generation sets the standard, as Balme points out; asexual or spontaneous generation is a departure from the norm. (GA I.1 and Balme Commentary, De Partibus Animalium I and De Generatione Animalium I, op. cit., p. 128)

¹⁸ Stephen Menn. "The Origins of Aristotle's Concept of Energeia: Energeia and Dunamis." Ancient Philosophy 14: 73, 1994, especially Section B.2 on potentialities located in the prior actualities.

¹⁹ GA IV.1. Also Balme, De Partibus Animalium I and De Generatione Animalium I, op. cit., Notes, p. 140. Thomas Laqueur, Making Sex. Body and Gender from the Greeks to Freud. (Cambridge, MA: Harvard University Press, 1990. Chap. 2) misrepresents Aristotle's account of generation, both in detail and in general, referring to it as a "one-sex" and as a "one-seed" theory. But HA X, for example, emphasizes that the female parent is a genuine contributor to generation:

"Now up to thrice seven years the seeds are at first infertile, then they are fertile but the offspring of young men and young women are small and imperfect, as in most other animals, too." (HA 582a17-20)

Balme's gloss (HA, p. 423) notes the clear implication that the female, too, produces seed (sperma). This means that for Aristotle, both male and female are generative and both are true parents. Balme comments on theories of male and female contributions to generation (HA Bks VII-X, pp. 487-9, and pp. 26-30 on the compatibility of GA and HA). He holds that throughout HA X, "Aristotle argues that the female contributes seed to generation..." in opposition to the idea that only the male does so that only he would be the true parent. (See too HA 489a9-12) Also relevant is Balme's discussion in "Anthropos anthropon genna. Human is Generated by Human," (The Human Embryo. Aristotle and the Arabic and European Traditions. Exeter: University of Exeter Press, 1990, pp. 20-31). Preus, too, accepts the female's authentic spermatik contribution to generation (Anthony Preus, "Science and Philosophy in Aristotle's Generation of Animals." Journal of the History of Biology 3, 1970, p. 6). But Balme observes, "It is odd, on the other hand, that in GA Arist. does not refute the opposing view (that the male alone contributes to generation); he mentions it without further argument at I 721a35, IV 763b30." I submit that GA as a whole, with its initial thesis that the male and the female are the

By establishing different male and female contributions, each of which is the child potentially, Aristotle makes three important points about the child against rival theories: (a) Compared with single-parent theories of generation, he links the child with both parents, since both are always necessary causal contributors to the offspring's coming to be.²⁰ Both bear necessary potentialities which interact to generate a new substance. (b) Compared to preformationist theories, he minimizes the role of external, chance factors in the child's formation. For example, in Empedocles' scheme where each parent offers preformed seed, the luck of the hotness or coldness of the uterine environment determines the offspring's destiny.(764a1-7 f.) Again, according to Anaxagoras, the decisive occurrence has to do with the chance location of the deposited sperma on either the right or left side of the uterus.(763b30-35; 765a4-34) Aristotle will have none of this.(e.g. 764b10-15) Instead, for him the child's generation has a regular causal structure in the two parents and as such is intelligible.²¹ (c) Compared to materialist theories such as those of Democritus and Hippocrates, both of whom make the parts of the offspring's body "prior to" and causal of the whole body, for Aristotle the parts themselves must have a prior, ordering causes.²² These causes are the generative material always provided by the female parent, combined with the generative motions always contributed by the male parent. As he indicates at the start of the treatise, however, there are not just two but four causes which must be taken into account. Two of these, the formal and final, really distinguish Aristotle's view from those of the physiologists and medical writers, since for him the formal and final causes work to direct and organize the

archai of generation, functions as a refutation of the one-seed view.

²⁰ He notes instances where male and female do not together play a role in generation, e.g. spontaneous generation (GA 715b7-16) and wind-eggs (GA 737a25-34), but these are exceptions to nature's rule.

²¹ Democritus' theory, perhaps more sophisticated than theirs in that it allows better than theirs do for something like a regular principle of causality (i.e. strength), holds that the determination of which seed prevails occurs in the uterus according to which is stronger, that of the female or male parent. Aristotle will employ a modification of this view in his own explanation of infertility and inheritance. See too 767a36 f. on "mastery" in inheritance; see, too, 767a14 f. on the need for symmetria between the two parents. That is, the couple must be in the right "balance" in order to effect generation. The juxtaposition of the two concepts in the passage is telling and emphasizes the necessary role of the two in generation.

²² See GA 722b6-724a14 against Empedocles, Anaxagoras and Democritus. Compare Aristotle's emphasis on the unity of the organism and thus the need for formal explanation with Hippocrates' emphasis on parts in, for example, "The Seed" and "The Nature of the Child," and the Hippocratic mode of explanation which avoids formal and final causes. Beate Gundert, "Parts and their Roles in Hippocratic Medicine." Isis 83:453-465, 1992, writes on Hippocratic explanation:

"When occasionally the relationship between part and process is characterized in terms of cause, it is always one of consequence - for example, 'We speak from the lung, because it is hollow and the windpipe is attached to it....' [Morb.4.56 (7.606.1-2)].... - never of finality or purpose. Parts may perform particular roles because they have given structures; there is never any hint that they have particular structures in order to fulfill given roles." (p. 465)

body's parts.(GA 778b2-12) Generation, the coming-to-be of a highly organized substance, is intelligible only on condition that there be formal direction for the new, unified nature. In his account, the moving cause of generation is also the formal and final cause. This, then, is how genesis is ordered formation. The necessary and sufficient determinations for the offspring are routinely a shared contribution of the parents, relying fundamentally on them and not on vagaries of external factors or accidental conditions.²³ Aristotle further stabilizes the formative process when, in GA II.1, he situates the parents themselves in an expanded causal scheme, stating that individual instances of generation are part of the perpetuation of the species, the kind of eternal life open to animal life.²⁴ This is why generation occurs, to actualize eternity, a good, to the extent that it is possible.

The linkage between parent and offspring is explored at length in Book IV. Here Aristotle begins by asking how male and female come to be; this question leads to the broader question of inheritance of other characteristics and family resemblance generally. He puts the matter strongly: "...anyone who does not take after his parents is really in a way a monstrosity since in these cases Nature has in a way strayed from the generic type." (GA IV.3 767b7) He posits a scale ranging from very close resemblance (i.e. a boy who looks very much like his father), to small and necessary deviations from what appears initially to be an ideal of replication (e.g. a girl who looks like her father rather than her mother, a boy like his mother or grandparent or other relative), to deformed children and finally monstrous births marked by full departure from the human type.(GA 767b8 f.) Aristotle hastens to explain that at least the initial deviation from boy to girl is required by nature in order to accomplish its final aim of perpetuating the species; thus, despite the possible appearance of the superiority of replication, or of a single, superior sex, it is not the case, in his view, that nature operates this way or should do so. Deformities and monstrosities, however, are not fulfillments of any final cause, but are chance occurrences, that is, unfortunate departures from or failures of finality. The final aim for human children in the context of GA is to be human ("anthropos anthropon gennai" 735a21), to be healthy and to closely resemble but not replicate their parents.²⁵

We note, too, that the characteristics relevant to a discussion of inheritance are those that belong

²³ Often in GA Aristotle takes note of the impact of unfortunate factors (e.g. as in deformities GA 767b8), but these are understood to be departures from the norm of regularity.

²⁴ The child, then, can be regarded as part of this larger causal nexus.

²⁵ "Now both the individual and the genos to which it belongs are at work in the act of generation; but of the two the individual takes the leading part...." (767b30 and 33 f.) Inheritance and whether and how it occurs at and possibly "below the species level" is a matter of considerable debate in contemporary scholarship. The literature is too extensive to cite fully, but for representative views on both sides see D.M. Balme, "Aristotle's Biology was not Essentialist," in Allan Gotthelf and James C. Lennox, Philosophical Issues in Aristotle's Biology (NY: Cambridge University Press, 1987); Alan Code, "Essentialism and the Life Sciences in Aristotle."(unpublished paper) The significance of the question lies in understanding Aristotle's conception of "form," and whether for him form is individual.

to the parent not accidentally but qua procreator; the examples he supplies of parents' irrelevant characteristics are being a grammatikos, a "teacher" or "scholar," or being someone's next-door neighbor. (767b27-30) We might have wished for further clarification of the distinction between what is and is not relevant for biological inheritance with some positive examples. But the discussion of inheritance in GA - and the treatise as a whole, for that matter - is notable for what it does not contain. Aristotle does not say that individual temperaments, characters or intellectual talents are determined by inheritance.²⁶ He makes no mention of inherited blood guilt, curses, and the like, and he says nothing of inheriting the qualities of one's class.²⁷ Nor does he speak of autochthony, a long-standing and popular Greek myth of origins from the earth.²⁸ The biology is concerned with the formation of the animal qua animal, its body and the parts of the body, not the formation of individual character or social relations. The body and its parts aim at completion, at the full formation of the organism.²⁹ That Aristotle does not include popular, cultural notions in his biological treatise indicates his intention to keep separate the different domains of knowledge in his investigations.

The parents, as we saw, are the originary formative causes of the child's coming-to-be. But it is important to note, too, that beyond the parents' originary force, the offspring will develop in accord with its own inherent principles of growth: "...for of course nothing generates (genna) itself, though as soon as it has

²⁶ See Problemata on natural (congenital) temperament (XXX.1, e.g.). Character must of course be formed through upbringing (NE). Whether some individuals are more disposed to good character through inherited traits Aristotle does not say here, although at NE 1179b7-10 he refers to "an inborn nobility of character," and shortly after makes the surprising statement: "natural endowment is not under our control; it is bestowed on those who are fortunate, in the true sense, by some divine dispensation." (NE 1179b23) Intellectual skill is the result of training, or schooling. (e.g. Pol 1337b22 f.) His remark about the grammatikos at 767b27-30 suggests that an inclination or ability for such work is not to be explained by means of a dunamis inherited from the parents.

²⁷ Nothing is said of the matter of class in the biology, but Aristotle does comment (Pol 1255a26-27; also 1255a39-b6) that the children of slaves are not themselves necessarily slaves by nature.

²⁸ See Plato's use of this myth in Rep. III, 414c f. Also see Arlene Saxonhouse's discussion of the important role of autochthony in Greek culture in Fear of Diversity, (Chicago: University of Chicago Press, 1992), Chap. 5.

²⁹ On Book IV's theme of regularity in generation: the norm is to generate offspring like oneself; doing so requires male and female; inheritance: how regularity - and deviations from it - are produced from male and female; then, underdevelopment, redundancy of parts (overdevelopment), monstrosities, misc. irregularities; normal number of births, superfoetation, the finished or unfinished state of the young at birth; normal manner of birth (i.e. head first - the head is heaviest body part) and normal length of gestation.

In all these matters, Aristotle establishes the norm and examines its workings and the deviations from it. "Nature's aim," he says, "is to measure the generations and endings of things by the measures these bodies [i.e. heavenly bodies which move in regular periods], but she cannot bring this about exactly on account of the indetermination of matter and the existence of a plurality of principles which impede the natural processes of generation and dissolution and so are often the causes of things occurring contrary to Nature." (776a5-10)

been generated (genētai) a thing makes itself grow."(735a13)³⁰ He adds, "since it makes itself grow, it is something."(735a23) The offspring that results from the combination of the male and female generative contributions, from their combined potentialities, is an independent substance in Aristotle's view, with the means to direct its own growth. The heart is the first organ formed and it directs the nutritive requirements of the new individual.

We see, then, that the newly generated child originates in the combination of female generative matter and male generative movements, each of which is a particular potentiality for the kind of animal the parents are; these, together with the form and the telos, also from the parents, actualize and generate offspring of the parents' kind. The child's resemblance to one or both parents expresses that originary relation. Again, both parents contribute to the coming-to-be of the child, although one may be more influential than the other (compared to other theories in which one or the other parent exclusively holds sway). For Aristotle, the parents' necessarily joint contribution minimizes arbitrariness or randomness in generation.³¹ Generation is orderly because of the standard manner in which parents bring it about through their contributions. And the joint parental contribution accords well with the ordinary awareness that children do not simply replicate a parent but that the outcome of generation is a new substance. As long as both parents are necessarily contributors to every instance of a child's coming-to-be, it is impossible that only one should determine fully the child's potentialities; both always leave a mark. In this way, genesis is the coming-to-be of a new substance, a unique living entity. The human child is necessarily something new, is something itself with its own new set of potentialities, namely it is a substance with all that entails. Thus, Aristotle accounts for order and for newness in generation.

The biological treatise GA does the important job of explaining the "whence" of the child; the child's origins are definitively in the parents and their contributions to generation, according to Aristotle. The nature of the contributions, representing potentialities for individual and specific traits of both the male and female parents, and the joining together of these, also explains how the child can be a unique, new nature. Thus, he accounts for the early development of the child, up to its birth and shortly thereafter: the material and formal direction and sustenance of the parental contributions.³² Infancy marks a "soft boundary" of the

³⁰ Also, "...once a thing has been formed, it must of necessity grow. And though it was generated by another thing bearing the same name (e.g. a man is generated by a man), it grows by means of itself."(735a19-22)

³¹ This in contrast to modern scientific reasoning according to the evolutionary model where the increased genetic variation available in sexual reproduction is viewed as an evolutionary asset.

³² HA has not been examined in this paper, but there, when Aristotle writes at the start of IX.1: "With regard to man's development, both initially within the female and subsequently until old age, the attributes due to his proper nature are as follows." (HA 581a9-11, Balme translation,

early stages of the developmental process. Understanding development in the young child must move from what children have in common with animals, as studied in the biology, towards what is uniquely human, namely, ethical formation. We turn next to the child's formation in virtue explained in NE.

II. Ethics - Formation in the Oikos

The Nichomachean Ethics is an examination of the moral life understood in its relation to the natural human goal, happiness (eudaimonia). In NE I.7 Aristotle says that happiness is the activity of the soul in accordance with virtue (NE 1098a17), so that happiness, for the most part, is the outcome of responsible human activity rather than fortune or fate. (e.g. 1112b32)³³ In keeping with this insight, he emphasizes that the point of ethics is practical action, not theory (NE 1103b26-28; 1179b1-5), i.e. we wish to know what it is to become good and how to do so since it is largely in our power and in this lies our happiness. NE demonstrates the nature of virtues (Bks. III-V), justice (Bk. V), and friendship (Bks. VIII-IX) and the necessity of incorporating these in a human life in order for it to be a happy one. Doing so and hence becoming good is a lengthy process of training from childhood which starts in the household.³⁴ So while it is true that children do not comprise the stated focus of NE, seen in terms of the broadly defined purpose of ethics its concern is indeed children and their formation in virtue. Here, too, the parents are the direct causal contributors to accomplishing the ethical aim. Their on-going activities of nurture and discipline are the moving cause which will act on the child (as material cause) to bring about something new and ordered, i.e. virtue, out of mere wildness (akolasia).³⁵

Ethical formation of the child in the oikos consists of right "nurture and discipline" (NE 1180a2)

Loeb edition)

such an introduction seems to promise a description of the child's development, and indeed human development broadly. In fact, HA IX(VII) views development from the perspective of generation: conception, pregnancy, and labour and delivery, along with some related matters concerning, for example, semen and milk production. Within this topic, Aristotle considers puberty (581b20, 23) in that the evident changes at this age signify readiness to generate.

³³ Aristotle's implicit rejection of chance as primarily determinative of happiness or its absence is consistent with his position in the biology contra Empedocles et al. who hold that the offspring's attributes (such as its sex) are a matter of chance.

³⁴ On the meaning of genos and oikos, "family" and "household," blood kin and the larger economic unit including slaves and guests, closely blended notions, see for example, "Oikos and polis." and "The Family in Classical Athens: Search for a Perspective." In S.C. Humphreys. The Family, Women and Death. Boston: Routledge, 1983.

³⁵ See, too, Aristotle's remarks in Pol I: the child has the deliberative part of the soul but in an unfinished form (1260a15), and "the child is not completely developed, so that manifestly his virtue also is not personal to himself but relative to the fully developed being, that is, the person in authority over him." (1260b31-32)

undertaken by the child's parents. Nurture consists of providing affection, shelter and sustenance for the child. Discipline consists, on the one hand, in continually discouraging the child's "wildness," (akolasia) i.e. the free action of the passions and desires, and on the other, continually encouraging positive acts of virtue which by habituation will form a virtuous character. The chief attribute of growing children, according to the discussions in NE, is that they are "guided by feeling" rather than reason and experience. (e.g. NE 1095a8, 11; 1119a35; 1142a12 f.) In order for the child to grow to maturity, the guidance of reason - cultivated through the repeated exercise of restraint on the one hand and virtuous conduct on the other - must supercede acting out of impulse. The sources of this guidance are the parents.

As adults, the parents are able to assume the work of the child's ethical guidance and formation because their own deliberative faculties are mature and because they have had sufficient experience of life. In children, on the other hand, the noetic faculty responsible for deliberation is not developed (NE 1119b9-11); thus unable to deliberate, children are incapable of choice which is the mark of true ethical activity. So, too, children cannot be said to be happy (NE 1100a2); happiness requires the performance of noble deeds which as such must be deliberately chosen. Note, however, that Aristotle's statement is not a condemnation of children but rather an observation about their incomplete state of development: "when children are spoken of as happy, it is in compliment to their promise for the future." (NE 1100a3) Similarly, in the case of the "wildness" which is so characteristic of children, he writes of children's need for discipline and he assumes their capacity for obedience (NE 1119b 4-16), both of which bespeak a potential for order within the child. When discussing the need for controlling the child's akolasia, he seems to suggest that the parents' authority and competence stem from their own proper, actualized self-control, that is, that principle prevails over unprincipled desire in the parents qua adults (although he mentions that there are adults who are wild and intemperate themselves).

Aristotle thus sees the parents as prior actualities, ethically complete (i.e. "adequate" rather than "perfect") due to their own earlier ethical training and their experience of life. Their ethical actualization is in this case the capacity for activities of nurturance and discipline of the child. The nurturance and discipline are the moving causes of the child's own eventual actualization as ethically complete. The repeated activities of the parents are the sources of the ethical telos for the child, i.e. virtue. The achievement of the telos by the child will be marked both by independence from the parent's ethical guidance, since the child can now deliberate for him or herself, and at the same time resemblance to the parents in that the virtuous disposition will be similar in parents and their children. The pattern of completion here in the ethics is much the same as in the biology: there, the child comes-to-be as a generatively complete human animal at birth, and at birth the child is both independent from the generative sources as well as the same in kind as them. If parents, in most cases, are capable of the task of the ethical formation of their children, i.e. their nurture and discipline. But what prompts them to take up this work? An explanation is available in the Politics where Aristotle upholds the family and the household against Socrates' proposal for their elimination. A preliminary

answer is available here in NE, however, in his designation of the relationship between children and parents as a philia, "friendship," of unequals. In Book VIII, Aristotle extolls and analyzes friendship, of which the parent-child relation is one kind. The affection of offspring for parents and parents for offspring is natural, he says at the start, not only among human beings but among other animals too. (NE 1155a17) But among human beings affection seems to be secondary to the obligations of the relation:

"...the friendship between parents and children will be enduring and equitable, when the children render to the parents the services due to the authors of one's being, and the parents to the children those due to one's offspring." (NE 1158b21-23)

At stake here is the tension between justice and friendship which Aristotle addresses in Book VIII.³⁶ The solution appears to be that friendly affection is natural in the relation between children and parents but the feeling does not define the relationship. Rather, affection is present in a successfully maintained relationship - the natural state of affairs, in his view - and indicates a proper ethical balance in the underlying bond itself.³⁷ That is, the parents bring children into being and subsequently nurture and discipline them, i.e. they are the formative causes in generation and then assume the secondary, ethically formative role that follows from the first. The children born are the generatively complete result of the parents' potentialities (and this is why his statement that parents love their children as other selves is more than metaphor). At birth or sometime during infancy, the process of their generation is complete, that is, children are organically self-directed and separate from their parents. But the parents' own ethical adequacy allows them to recognize that as parents they possess further potentialities to be actualized for their children. These, again, are actualized as nurture and discipline which convey the ethical telos to the child. Finally, then, the children's affection for their parents is the outcome and evidence of their parents' successful efforts at ethical formation since affection, a disposition, is possible only when akolasia has been mastered. (NE 1161b26)

In the discussion so far we have spoken of the ethically formative work of the "parents." Referring to the mother and father in this undifferentiated way is acceptable and Aristotle does so himself (e.g. hoi goneis 1161b18, 19,20) when the relevant distinction is between the grown adults and their offspring, as it most frequently is. But he also recognizes distinctions between the father and mother vis a vis the child, such as the "father's exhortations" as head of the household and its chief authority (NE 1180b5), and the comments on "the pleasure mothers take in loving their children" (NE 1159a28-33), the paradigm of friendship as marked more by the giving than the receiving of affection. The observations about differences between mothers and fathers

³⁶ See Joseph Cropsey. "Justice and Friendship in the Nicomachean Ethics." Political Philosophy and the Issues of Politics. Chicago: University of Chicago Press, 1977.

³⁷ But note Pol 1255b1-3: "...they [erroneously] assume that just as man springs from man and from brutes a brute, so also from good parents come good offspring; but as a matter of fact nature frequently while intending to do this is unable to bring it about."

are, however, scanty and like other matters in ethics they are not hard and fast. (For example, see NE 1160b23 f. for some variations, such as when the wife rules in the oikos.) Within Book VIII, rejecting attempts at universal definitions of friendship, he offers a reminder about the proper procedures and concerns of ethics:

"Dismissing then these scientific speculations as not germane to our present inquiry, let us investigate the human aspect of the matter, and examine the questions that relate to man's character and emotions...."
(NE 1155b8-10)

The human aspect of character and emotions that is fundamental to ethics introduces greater possible variety in comparison with regularities observable elsewhere in nature. Unlike the biology where the separate generative contributions of the male and female parents are regular and stable and must be so in order to account for regularities in the coming-to-be of new substances, the ethics allows for more latitude in the kind of formative work performed by each of the parents. Ethics can do so because it does not need to account for substantial change, as the biology does. Thus it is not necessary to have female and male parents make separate and different causal contributions. Rather, the ethics looks to account for alteration from akolasia to a well-ordered character. In this process the parents together function as moving causes with room, apparently, to share the work of nurture and discipline. So although Aristotle holds that the virtue of men and women differs (Pol 1260a f.), he makes little of it in discussing children and their upbringing.

One further contrast between the ethics' treatment of the child and that of the biology can be offered. In NE, he speaks of the child's siblings and companions as friends, and mentions the child's tutor and the slaves within the oikos as well.³⁸ In other words, at this stage of the child's development a widening circle of influences is found. Recall that in GA Aristotle distinguishes his theory from others by minimizing the place of random or haphazard factors in generation and limiting formative influence to the two parents. In the ethics, he recognizes the presence of other influences on the child. It is clear, however, that in his view none of these relations should rival the significance of the formative work of the parents, and indeed warns against undue external influences. (e.g. Pol 1336a39-41; b4-14)

III. Politics - Formation through the Polis

The parents have brought the child into being and have begun the work of tempering the child's wildness through nurture and discipline. In defending the family against Socrates' proposal of a radically common life as an ideal (Pol II.1-2), Aristotle makes it clear that the formative work on the child undertaken in the oikos is non-transferable to the polis. Personal affection and caring are the marks of life in the oikos and these are indispensable for the child's early ethical training. In Pol VII (again as in Pol II, the context is the consideration of the best government) the topic of education arises. Here, however, he discusses education

³⁸ Mark Golden, "Pais, Child and Slave," *op. cit.* on children and slaves. Also see his fine study Children and Childhood in Classical Athens. (Baltimore, MD: The Johns Hopkins University Press, 1990) for an extended examination of children's many relations both within and outside of the oikos.

in connection with the unity of the polis, so that the formative role of the polis in the child's development emerges through the effects of the lawgiver's regulations and through polis schools.

One of our initial observations concerned the division of the sciences and the importance of keeping distinct the phases and hence the tasks of the child's generation and growth, with the aim of showing why these need to be studied by different sciences, i.e. biology (GA), ethics (NE) and politics (Pol). The Pol now provides confirmation of this thesis in its discussion of a new causative agent, namely the polis, and a new venue of formation, namely the school and the polis broadly. But the initial question was whether or not, given the division of these sciences, it is possible to achieve a comprehensive and unified notion of the child, or whether the different phases studied by the separate sciences remain disconnected. An answer to this question comes more clearly into view in the Pol.

The best governed state will provide the most opportunity for its citizens' well-being and happiness (1332a5-8), and NE has established that human happiness is a life of fully actualized virtue. This, then, is the political telos. While some external goods are needed for such a life and

"...that fortune does control external goods we acknowledge, but when we come to the state's being virtuous, to secure this is not the function of fortune but of knowledge (epistēmēs) and choice (proairesēōs)." (1332a31-33)

As in the other developmental phases examined, Aristotle here underscores the intelligibility of the process and shows chance to be a minimal factor. The question to ask is: how does a citizen - or a person - become virtuous? He says that there are three relevant factors, namely nature, habit, and reason, and it becomes clear that the three match the phases of the child's formation we are proposing. "To start with, one must be born with the nature of a human being..."(1332a41); sexual generation does this work of nature. Then, he says, habits are imposed, for better or worse, on the qualities the human child is born with; early ethical training in the oikos does the work of changing given qualities into (virtuous) habits. "But human beings live by reason also..."(1332b5); reason is the distinguishing mark of the human. He adds that these three - nature, habit and reason - must be in harmony in human beings. Reason must be trained, and Aristotle now pursues the question of what that training should be.

"No one will doubt that the lawgiver should direct attention above all to the education of the children; for the neglect of education does harm to the constitution."(1337a10-11) Education should be directed to the needs connected with one's role in adult life, especially the needs of statesmen and citizens. But in the best-governed state, all citizens will share, in turn, in ruling and being ruled. Thus, a single plan of education, shared by all children, is appropriate.³⁹ Not only should there be a single educational program but since the

³⁹ See too 1337a22-26, "And inasmuch as the end for the whole state is one, it is manifest that education also must necessarily be one and the same for all and that the superintendence of this must be public, and on private lines, in the way in which at present each man superintends the education of his own children, teaching them privately, and whatever special branch of knowledge he thinks fit."

best communities and the best individuals have the same goals (i.e. temperance, justice, courage, love of wisdom), the lawgiver's work of establishing such schooling will have a common, unified benefit for both the polis as a whole and its individual citizens. Indicating these educational purposes and the unification implicit in them, Aristotle returns to the nature-habit-reason scheme of development to consider how each of these phases might be trained towards virtue and nous (1334b16), stating that "it is with a view to these ends that our engendering (ten genesin) and the training of our habits must be regulated."(1334b16-18) The proper order of training, then, is first body, then appetite and then intellect (appetite and intellect corresponding, respectively, to the irrational and the rational parts of the soul).

In keeping with his responsibility for the training of the body, the lawgiver supervises marriage unions, to assure that children with strong, well-balanced constitutions are born from well-matched parents of a suitable age who take proper physical care of themselves. (Pol VII.14) Once children are born, Aristotle recommends milk and physical activity for them. Up to the age of five, play should be their primary activity rather than intensive exercise or study. But even the play and story-telling of early childhood should be directed positively with the ultimate goals in mind. Furthermore, since children see and hear so much and are so impressionable, the lawgiver should regulate against indecent images and public talk, and those individuals violating these regulations should be punished - that is, the failure of virtue in the polis at large needs to be disciplined for the sake of children's proper formation.

The child should be raised at home until the age of seven. At this age, however, the first of the two periods of publicly-supervised education begins (the first period runs from age seven to puberty, i.e. age fourteen, and the second from age fourteen to twenty-one). Education carried out privately by privately hired tutors is haphazard and not conducive to the unity of the polis.(1337a21-30) Aristotle weighs what subjects should be included in the program of the common, public schooling. He determines that some studies should be provided to children because they are useful or necessary for working or living as an adult. Other studies should be provided just because they are liberal and noble and they prepare children for a free and noble life.(1338a40-b4) But before delimiting these studies, Aristotle restates the principle that prior to the training in reason must come training of ethical habits, and prior to that must come training of the body. He resumes his talk of the details of the educational plan from the beginning, that is, starting with gymnastic training. Exercise is to be moderate, building gradually in intensity; he warns against the excesses of the Spartans and their regimens which produce an animal-like nature in children.(1338b9-13) Next he considers the inclusion of music. Clearly music is pleasant, but the question from the point of view of educating children is: does it affect the character and the soul? He concludes that music contains imitations of character (1340a40), and that it has the "power of producing a certain effect on the moral character of the soul" (1340b11-13), so that children must be educated in it. In any case, he observes, music suits them because it is pleasant and as children they find it is hardly possible to teach children anything unless it is sweetened with pleasure. Thus, the best educational program should include music. The discussion of children's education

- and the Pol as a whole - closes with Aristotle's summary of the three principles that should guide education, and indeed have guided from the start his own discussion of the child's formation: moderation, possibility and suitability.

Conclusion

The discussion of children in the Pol VII and the linking of nature, habit and reason we have just examined confirms our thesis that Aristotle has a composite conception of the child and that it can be reconstituted by way of a linked examination of his analyses in the biology, ethics and politics. We have seen that the child has his or her beginnings prior to birth and grows from unfinished to finished adulthood through linked phases. Each phase of development has its own telos - the complete human animal nature at birth, the complete ethical character later on, and the cultured, educationally complete person ready for adult life in the polis - and so is differentiated. The teloi need to be maintained as separate and cannot be collapsed because different kinds of change are at issue, namely substantial change in the biology and alteration in the ethics and politics. At the same time, however, continuity is evident in several ways. Each phase is linked with the next as a prerequisite. Each phase maintains a common general formula for the child as unfinished. In each phase the theme of minimizing randomness and maximizing order and intelligibility is evident. And each phase adopts a common explanatory scheme to provide for the order and intelligibility of the child's generation and development, a scheme whereby a prior actuality or actualities provide the potentiality necessary for the appropriate change.

Are these commonalities enough to connect the distinct discussions and unify them in a comprehensive account of the child? It might be suggested, for example, that the actuality/potentiality scheme is at work throughout Aristotle's philosophy and so is too generally applicable to establish the kind of continuity required here. Similarly, establishing preparatory or prerequisite connections among phases does not necessarily define adequately the relationship among the phases.⁴⁰ A complete treatment of these questions would require an examination of Aristotle's discussion of and criteria for unity in the Meta, but that is beyond the scope of this paper. For the present, however, we might note a particular feature of Pol VII and VIII suggestive of a mode of the child's unification.

In these books, Aristotle gives the lawgiver in the best of cities the authority to supervise marriage unions and to make recommendations about the young child's up-bringing. The lawgiver's influence, in other words, is not restricted compartmentally to the child's public schooling in later life, but as we saw extends "back" to the child's very sources and then to the child's infancy in the oikos. Indeed, his influence is not only intensive throughout the child's lifespan but extensive as well, reaching broadly to the aspects of social

⁴⁰ For example, logic is a prerequisite for the study of metaphysics, but the full nature of the relation between these studies is not thereby revealed.

life that need regulation due to their impact on children . The lawgiver's actions, then, are directive of the good of the child prior to her or his very beginnings through to adulthood. The ultimate aim is the healthy adult, ethically developed and educationally prepared for a life in the polis. And, it might be added, prepared to commence the next cycle: of begetting offspring, of raising them and training them in good habits in the oikos, and participating in polis life in a way that carries on or cooperates with the good aims of the lawgiver, so that the continuity is expansive. Thus, the child's unification has its sources, for Aristotle, in a consciously directed good which oversees all the aspects of the child's generation and development. The lawgiver, with his own cultivated nous, also recognizes the distinctions in the phases (i.e. nature, habit, reason) and the telos proper to each. The telos of each phase in the child's life is a good, but these goods are comprehensively considered and directed through the lawgiver's intelligent and virtuous purpose: the well-being of the child and the completion of the adult. In this respect, then, Aristotle maintains his division of the sciences and achieves a coherent and unified conception of the child.