One Thing, Two Things Aristotle and Individuation

Two Oft-Conflated Questions

- * The Principle of Unity:
 - * What makes several things one thing?
 - * So, e.g., in virtue of what, if anything, makes these hands, this head, this torso. . .one human animal?
- * The Principle of Individuation:
 - * When x and y are both φs, where φ is some sortal kind K, what makes x and y distinct φs?
 - * So, e.g. when two pennies are minted in the same mint on the same day, displaying the same form, what makes two pennies two?

PI, Strong and Weak

* The question: when x and y are both φs, where φ is some sortal kind K, what makes x and y distinct φs?

* That question is ambiguous, as between:

- * Weak:
 - * What makes an individual numerically distinct from all other actual individuals, including those in its own kind?
- * Strong:

* What makes an individual numerically distinct from all other possible individuals, including those actually and possibly in its own kind?

Further Distinctions

- * Put this way, our question is metaphysical rather than epistemological.
 - * It prescinds from the question of how we come by the the knowledge of diversity, even given an answer to the metaphysical question.
- * So far, it does not discriminate between synchronic and diachronic questions of individuation:
 - * Synchronic: when, at t_1 , x and y are both ϕ s, where ϕ is some sortal kind **K**, what makes x and y distinct ϕ s at t_1 ?
 - * Diachronic: when, at t_1 and t_2 , x and y are both ϕs , where ϕ is some sortal kind **K**, what makes x and y distinct ϕs at times t_1 and t_2 ?
- * Note that these questions make come apart, particular in Theseus-ship style cases.

Theseus's Ship Sails Again

* The ship wherein Theseus and the youth of Athens returned had thirty oars, and was preserved by the Athenians down even to the time of Demetrius Phalereus, for they took away the old planks as they decayed, putting in new and stronger timber in their place, insomuch that this ship became a standing example among the philosophers for the logical question of things that grow, one side holding that the ship remained the same, and the other contending that it was not the same.

—Plutarch (Vita Thesei, 22-23)

Theseus's Ship's Argument. .

(1) The working ship at t₂, which has sustained material replenishment, has a claim to being identical with the original ship at t₁.

(2) The reconstructed ship at t_2 has a claim to being identical with the original ship at t_1 .

(3) If both ships have a claim but neither ship has a better claim than the other to being identical w/ the original ship at t₁, then either: (i) they are both identical w/ it; or
 (ii) neither is.

(4) In fact, neither ship has a better claim than the other to being identical w/ the original ship.

(5) So, either: (i) they are both identical w/ it; or (ii) neither is.

(6) It's not possible that (5.i).

(7) So, neither ship at t_2 is identical w/ the original ship at t_1 .

. . . Applied to PI

- * Suppose we have two qualitatively identical ships T_1 and T_2 at t_1 .
- * One might plausibly think—employing traditional answer associated (by one camp) with Aristotle—that what makes them diverse is their *matter*.
 - * Although the same in form, T_1 and T_2 differ in matter; T_1 is composed of q_1 and T_2 of q_2 , and q_1 and q_2 are not the same quantity of matter.
- * That seems plausible for the synchronic case but rather less promising for the diachronic case.

The Traditional Camp I

* A Passage from *Metaphysics* Δ 6:

- * Again, some things are one with respect to number, some with respect to form, some with respect to genus, some with respect to analogy: in number things <are one> whose matter is one, in form things <are one> whose account ($\lambda \dot{0}\gamma o \zeta$) is one, in genus things <are one> whose scheme of predication is the same, and with respect to analogy things as many things <are one as are> related as one thing to another (1016b31-35).
- * ἕτι δὲ τὰ μὲν κατ' ἀριθμόν ἐστιν ἕν, τὰ δὲ κατ' εἶδος, τὰ δὲ κατὰ γένος, τὰ δὲ κατ' ἀναλογίαν, ἀριθμῷ μὲν ὡν ἡ ὕλη μία, εἴδει δ' ὡν ὁ λόγος εἶς, γένει δ' ὡν τὸ αὐτὸ σχῆμα τῆς κατηγορίας, κατ' ἀναλογίαν δὲ ὅσα ἔχει ὡς ἄλλο πρὸς ἄλλο.
- * Their thought is that things one in number (ἀριθμῷ) are precisely those whose matter makes them one in distinction to their being one in form (εἴδει).

The Traditional Camp II

- * A Passage from *Metaphysics* Z 8:
- * When a whole exists, such and such a form in this flesh and these bones, <that is, e.g.> Callias or Socrates; and they are different (ἕτεϱον) because of their matter—for that is different, but <they are> the same in form—for the form is indivisible. (1034a5-8)
- * τὸ δ' ἅπαν ἤδη, τὸ τοιόνδε εἶδος ἐν ταῖσδε ταῖς σαρξὶ καὶ ὀστοῖς, Καλλίας καὶ Σωκράτης· καὶ ἕτερον μὲν διὰ τὴν ὕλην (ἑτέρα γάρ), ταὐτὸ δὲ τῷ εἴδει (ἄτομον γὰρ τὸ εἶδος).
- * Here the thought is that when two entities are members of the same kind **K**, they share a form but differ in matter.
- * That comes close to stating the traditional interpretation of matter as the synchronic PI.

An Answer?

* Suppose we answer the weak synchronic version of our question regarding the principle of unity:

 * What makes an individual x kind φ numerically distinct from all other actual individuals of kind φ?

* Thus:

* The principle of synchronic individuation is *matter*.

An Immediate Complication

* Individuals *qua* individuals are indefinable (*Met*. Z 10 1036a2-8, Z 15, 1039b2-6; cf. *Met*. Z 4 103012-11; Z 11 1036a28-32, 1037a28)

* Thus, neither Socrates nor Callias is definable; only humans are definable.

- * Aristotle will thus say that an individual is a definition *plus* matter (*Met.* I 9 1058b10, Z 11 1037a1-2, 28-29, Z 15 1039b21-3)
 - * Matter, though, may be taken qualitatively or quantitatively.
- * This suggests that accidents in either category may serve as the PI—matter, says Aristotle, is the origin of all accidents (*Met*. E 2 1027a7).
- * Yet two things x and y in kind K can be qualitatively identical with respect to their accidents.

A Stroll through the Options

- * Possibly/Actually (at t_1 , where x and y are both ϕ s and ϕ is some sortal kind **K**, x and y are numerically distinct).
- * This is either a primitive or a principled fact.
 - * If it is primitive, there is nothing more to say. (Deal.)
 - * If it is principled, there is some *principium p* in virtue of which x and y are numerically distinct.
 - * In a hylomorphic context, this *principium p* will be either: (i) form or (ii) matter. [If we are thinking of the compound itself as a third alternative, plausibly we have a primitive difference.]
 - * If (ii), then PI will appeal to an accidental difference, which will be either (a) qualitative or
 (b) quantitative.
 - * If (i), then PI will appeal to an essential difference; but then distinct forms must be themselves particulars. So, there would be qualitatively distinct particular forms. [Some call them 'souls'.]