#### Rational/Non-rational Powers

Two-way/One-way Powers

## The Main Claims of © 2

- \* First, two distinctions among active powers:
  - \* Some are rational and some non-rational (1046a36-b4)
  - \* Some are two-way and some one-way (1046b4-7)
- \* Second, these claims co-ordinate:
  - \* If  $\Delta$  is a rational power, then  $\Delta$  is a two-way power
  - \* If  $\Delta$  is a non-rational power, then  $\Delta$  is a one-way power
- \* Third, a rational power is related to its two outcomes differently:
  - \* If  $\Delta$  is a rational power for  $\phi$ -ing, then  $\Delta$  is *per se* related to producing something  $\phi$  and co-incidentally related to producing the privation of  $\phi$ .

# The Basic Divisions of © 2

- \* Psychic Powers: 1046a36-b4
- \* One- and Two-Way Powers: 1046b4-7
- \* Arguments for Co-ordination: 1046b7-15
- \* Rational and Non-rational Agents: 1046b15-24
- \* Normative Dimensions Made Explicit: 1046b24-8

## Psychic Powers: 1046a36-b4

- \* Since some principles are the sorts that inhere in soulless things, and some inhere in ensouled things—i.e. in the soul, in the part of the soul having rationality (*logos*), it is clear that among powers some will be non-rational and others proceed with rationality. Wherefore all crafts and productive sciences are powers, for they are productive of changes in another or in themselves *qua* other
- \* Ἐπεὶ δ' αἱ μὲν ἐν τοῖς ἀψύχοις ἐνυπάρχουσιν ἀρχαὶ τοιαῦται, αἱ δ' ἐν τοῖς ἐμψύχοις καὶ ἐν ψυχῆ καὶ τῆς ψυχῆς ἐν τῷ λόγον ἔχοντι, δῆλον ὅτι καὶ τῶν δυνάμεων αἱ μὲν ἔσονται ἄλογοι αἱ δὲ μετὰ λόγου· διὸ πᾶσαι αἱ τέχναι καὶ αἱ ποιητικαὶ ἐπιστῆμαι δυνάμεις εἰσίν ἀρχαὶ· γὰρ μεταβλητικαί εἰσιν ἐν ἄλλῳ ἢ ἡ ἄλλο.

#### Rational and Non-rational Powers I

- \* RP-1:  $\Delta$  is a rational power *iff*  $\Delta$  is at home in a soul, and indeed in the part of the soul having rationality (*logos*).
- \* RP-2:  $\Delta$  is a rational power *iff*  $\Delta$  is the power it is in virtue of being a power with a categorial basis in the soul, and indeed in the part of the soul having rationality (*logos*).
  - \* This would be to say:
    - \* The natures of powers derive from the natures of their categorial bases.
    - \* Rational powers are two-way because of some further facts about rationality (*logos*) itself.
      - \* What might those further facts be?

#### Rational and Non-rational Powers II

- \* An illustration of corollary:
  - \* The crafts, the productive sciences, such as medicine, are themselves rational powers, as productive of change.
    - \* Here we might think of 'productive science' as, more exactly, scientific knowledge.
    - \* The point would then be a nod in the direction of the suggestion that a *science* qualifies as an efficient cause, a source of change (*Phys.* 195 a 6-8; cf. *Met.* 1013 b6-9)

#### One- and Two-Way Powers: 1046b4-7

- \* Those proceeding with rationality are, the same ones, of contraries, but in the case of non-rational one power is of one thing, for instance heat is a power of heating alone, whereas medicine is a power of illness and health.
- \* καὶ αἱ μὲν μετὰ λόγου πᾶσαι τῶν ἐναντίων αἱ αὐταί, αἱ δὲ ἄλογοι μία ἑνός, οἱον τὸ θερμὸν τοῦ θερμαίνειν μόνον ἡ δὲ ἰατρικὴ νόσου καὶ ὑγιείας.

# One- and Two-Way Powers I

- \* OWP-1:  $\Delta$  is a one-way power *iff*  $\Delta$  is a power for producing one result only.
- \* TWP:  $\Delta$  is a two-way power *iff*  $\Delta$  is a power for producing one of two contraries (*enantia*).
  - \* Contraries are not contradictories.
  - \* Rather, contraries are best conceived as opposites along a continuous quality space:
  - \* Contradictories: hot and not hot, white and not white, healthy and not healthy, rational and not rational
  - \* Contraries: hot and cold, white and black, healthy and unhealthy, rational and irrational
    - \* If so, two-way capacities are constrained to operate over continuous value spaces

## OWP

- \* Note that as stated, OWP-1 is a bit underdetermined, if not simply false:
  - \* OWP-1:  $\Delta$  is a one-way power *iff*  $\Delta$  is a power for producing one result only.
- \* Heat, the power to heat, in fact produces a plurality of results: it causes water to bubble, sauna sitters to sweat, and uncles to become irascible.
- \* Moreover, heat, or something hot, can produce the contrary effect in something hotter: boiling water is cooled by the addition of hot water.
- \* Responses:
  - \* The second objection fails to respect the categorial complementarity condition already set down.
  - \* The first objection in a way runs afoul of the same condition, though it invites the further thought that a power  $\Delta$  is (must be?) individuated in a fine-grained manner, with reference to its categorial complement.
  - \* N.b. that x and y can be one and the same yet differing in being (to einai), that is, extensionally the same but intensionally distinct.

### TWP

- \* TWP must equally be understood with care:
  - \* TWP:  $\Delta$  is a two-way power *iff*  $\Delta$  is a power for producing one of two contraries (enantia).
- \* A TWP is keyed in the first instance, per se, to a one (positive) quality in a quality space.
  - \* Where  $\phi$  is health and  $\psi$  is sickness:
    - \* The medical power  $\Delta$  is a two-way power such that: (i)  $\Delta$  is a power for producing  $\phi$  per se; and (ii) is a power for producing  $\phi$  co-incidentally.
      - \* This suggests that the individuating categorial correlate in the case of medicine is being- $\phi$ , and more generally that for every two-way power  $\Delta$ ,  $\Delta$  is a power primarily and *per se* for producing just one result.
        - \* Still, unlike a OWP, a TWP can produce a second result co-incidentally.

#### Arguments for Co-ordination: 1046b7-15

- \* The cause is that science is rational, and this very rationality make clear the affair and the privation, though not similarly; and it in a way belongs to both and in a way it rather belongs to what belongs positively, so that it is necessary that these sciences are of contraries, the one *per se* and the other not *per se*; for in a way what is rational (the *logos*) pertains to one in a certain way *per se* and in another way to the other coincidentally; for it is by denial and bearing away that it makes clear the contrary. For at the primary privation is a contrary, and this is the a bearing away of the other.
- \* αἴτιον δὲ ὅτι λόγος ἐστὶν ἡ ἐπιστήμη, ὁ δὲ λόγος ὁ αὐτὸς δηλοῖ τὸ πρᾶγμα καὶ τὴν στέρησιν, πλὴν οὐχ ὡσαύτως, καὶ ἔστιν ὡς ἀμφοῖν ἔστι δ' ὡς τοῦ ὑπάρχοντος μᾶλλον, ὥστ' ἀνάγκη καὶ τὰς τοιαύτας ἐπιστήμας εἶναι μὲν τῶν ἐναντίων, εἶναι δὲ τοῦ μὲν καθ' αὑτὰς τοῦ δὲ μὴ καθ' αὑτάς· καὶ γὰρ ὁ λόγος τοῦ μὲν καθ' αὑτὸ τοῦ δὲ τρόπον τινὰ κατὰ συμβεβηκός· ἀποφάσει γὰρ καὶ ἀποφορὰ δηλοῖ τὸ ἐναντίον· ἡ γὰρ στέρησις ἡ πρώτη τὸ ἐναντίον, αὕτη δὲ ἀποφορὰ θατέρου

### Two Contentions

- \* These two primary distinctions co-ordinate
  - \* If  $\Delta$  is a rational power, then  $\Delta$  is a two-way power
  - \* If  $\Delta$  is a non-rational power, then  $\Delta$  is a one-way power

#### An Argument for the first Co-ordination

- 1. Necessarily, a rational capacity  $\Delta$  for producing  $\varphi$  is grounded in the possession of a *logos* of  $\varphi$  (1046b2-3, b16-21).
- 2. Necessarily, a *logos* of  $\phi$  will at the same time be (or be sufficient for having) a *logos* of  $\psi$ , where  $\psi$  is the contrary of  $\phi$  (1046b8-9, b2024)
- 3. Necessarily, possession of a *logos* of  $\phi$  (or of  $\psi$ ), is (or is sufficient for having) a capacity  $\Delta$  for producing  $\phi$  (or  $\psi$ ).
- 4. So, possession of a capacity  $\Delta$  for producing  $\varphi$  is necessarily also a capacity  $\Delta$  for producing  $\psi$ .
- 5. If (4), then necessarily, if  $\Delta$  is a rational power, then  $\Delta$  is a two-way power
- 6. Hence, for any  $\Delta$ , if  $\Delta$  is a rational power, then  $\Delta$  is a two-way power.