



# Foundation Encyclopedia Dialectica

Centers of Operation:  
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Terminus, California

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August 01, 2008 C.E. / B.U.E.

Subject: E. D. Briefs #2 - Meta-Monadology: The Universality Of The «Aufheben» Process.

Dear [www.dialectics.org](http://www.dialectics.org) Webmaster,

Greetings to you from F.E.D.!

Enclosed with this cover letter please find --

- E. D. Briefs #2 - Meta-Monadology: The Universality Of The «Aufheben» Process, Parts I. & II.

This cover letter conveys a new text, the second contribution to your new "E. D. Briefs" page, which has been contributed, not by a member of the Foundation, but by a reader of your site.

We could do no better than to present the following excerpt from the author's letter, by which he conveyed this text to the F.E.D. General Council:

"...What this text addresses, *in toto*, is the "'psycho-historical'", cognitive revolution that F.E.D. is offering. Its deeper title, then, should be --

*Announcing a Cognitive Revolution, Necessary Precursor to Mankind's Liberatory Transformation of the Capital-Relation as Predominant Social Relation of Production of Modern Society.*

As I state at the outset of Part II. of this text, I believe that experience with compact, explicit dialectical models; with the 'algorithmic dialectics' and the 'dialectical algorithmics' of, e.g., the Q categorial ideography, can help to catalyze, in the 'experiencer', a cognitive revolution. It can help to catapult that experiencer [deeper] into "'the dialectical operations stage of adult human cognitive development'". That, at least, has been my experience.

I also hold that such a revolution in cognition, diffusing in widening waves, rippling throughout the global populace, is prerequisite to a successful, liberatory transition to the higher polity - to the political-economic democracy - of 'democratic-communist' society, i.e., to the 'externality-equities based economic democracy that F.E.D. advocates [for more on this, see [www.equitism.org](http://www.equitism.org) -- F.E.D.]."

The rest of the content of Part II. is a specimen of the positive fruition of a Marxian, immanent critique of the core of Modern Science -- i.e., of an evocation of a determinate [self-]negation of the capital epoch's science of arithmetic, resulting in the discovery and presentation of an arithmetic for Marxian dialectics.

The 'cognitive revolution' created by the assimilation of the resulting "new <<organon>>" for science is catalyzed and facilitated by the new, partially-algorithmic, partially intensional/intuitional, and interpretive/connotative, Dialectical Heuristic of F.E.D.'s new, and *Trans-Leibnizian*, Dialectical <<Characteristica Universalis>>.

This *Mathematics of Dialectics*, fruit of the *Historical Dialectic of Mathematics*, and of the dialectical, *Immanent Critique of Modern Mathematics*, provides, at last, the precision ground-work of a non-reductionist, non-atomistic paradigm for a 'Trans-Modern Science' -- for a comprehensive Scientific and Mathematical Alternative to **Reductionism**.

The communication strategy applied in **Part II**. may be of interest to the **F.E.D.** General Council.

It essays to illustrate the unfamiliar -- in this case, both Systematic Dialectics, and the compact, mnemonic Modeling thereof in the language of **F.E.D.**'s new *dialectical algebra* -- via a partial reduction of unfamiliarity. It seeks to convey both of these "esoteric" topics via their illustration in the context of a topic which is exoteric to the readers of the [www.dialectics.org](http://www.dialectics.org) and of the [www.adventures-in-dialectics.org](http://www.adventures-in-dialectics.org) websites; well-known to them simply by virtue of their literacy.

The text of **Part II**. illustrates the narrative "method of presentation" [Marx] of systematic dialectics, and the compact modeling thereof via the new *Dialectical Ideography*, for the familiar case of *Phonetic Writing Systems*.

In this process, **Part II**. moves beyond insubstantial and external, undialectical critiques of Modern Science, to immanent critique. It locates the foundation of its critique in the very heart of the object of criticism, in this case, in the 'self-duality' of ordinary arithmetic. By then developing that immanent ground of critique, i.e., of the self-critical, determinate self-negation of standard arithmetic -- of 'it-self' by 'it-self' -- **Part II**. achieves a positive development that both supersedes and critically conserves the content of that object of criticism -- Modern Mathematics -- in the «*aufheben*», dialectical manner.

**Part II**. follows **F.E.D.**'s lead, essaying to aid the reader's discernment of this immanent ground of the critique of arithmetic also via the "'external'", 'psycho-historical' *evidence* of 'psycho-archaeology'. It does so, in this case, by resurrecting some terminology and concepts -- in particular, that of «*arithmos*» and that of «*monad*», or, respectively, that of "number" [of qualitative units] and that of [qualitative] unit -- from Ancient Mediterranean humanity's development of mathematics, up to the start of the last Occidental "Dark Ages". As we show, these Ancient developments partially survive, to this day, in vestigial and cognate forms within modern mathematical terminology and conception.

'Psycho-historical analysis' of the Ancient theory of arithmetic -- as elaborated also in Jacob Klein's book entitled "*Greek Mathematical Thought and the Origin of Algebra*", as well as elsewhere -- reveals a more sensuous and qualitative scientific and mathematical «*mentalité*» among our Ancient ancestors, versus that of Modern Occidental humanity. It reveals that Ancient «*mentalité*» to be, precisely, one not yet as pervasively impacted by the incessant experiences of *exchange-value exchange* as was the mathematico-scientific «*mentalité*» that had emerged by the time of the European Renaissance, closing the Occidental "Dark Ages". The later «*mentalité*» gave birth, at length, to Modern Science.

Humanity's pervasive and intensive diffusion, and incessant daily practice, of commodity exchange -- even of barter, but, especially, of money-mediated exchange of commodities, and of money-price-consciousness -- has subliminally introduced a fundamental confusion regarding the dispensability of the qualitative, and about the reductive 'equatability' of the *heterogeneous*, into humanity's «*mentalité*». This was evident already in Marx's analysis of the very «*arché*» form of exchange-value, the "*elementary or accidental form of [commodity-]value*", in his *Capital*, vol. I, Chapter I., Section 3. A.

This Ancient mathematico-scientific «*mentalité*» can thus be leveraged to outwardly 'co-illuminate' the ground of the innermost of the immanent critiques of Modern Science, that of Modern Arithmetic: the «*arché*» of all of the ideology, as also of much of the social-reproductive efficacy, of Modern Science.

The Modern «*mentalité*» is content with the purely-quantitative abstraction of ' $2 + 2 = 4$ '.

The Ancients' was not.

As evinced in the Ancient Alexandrian «*Arithmêtikê*» -- or '*«Arithmos-êtikê»*' -- of Diophantus, circa 250 C.E., in which the earliest known emergence of [proto-]ideographic-symbolic algebra was recorded, the Ancients required expressions of the form ' $\text{M}\beta'\beta' \text{I}\alpha. \text{M}\delta'$ ', wherein the Greek letter "beta" is used to represent the number we denote today by '2', the Greek letter "delta" to represent what we today denote by '4', the abbreviation 'I\alpha.' to represent "equals" or '=', and the abbreviation 'M' to represent the Greek word «*Μοναδος*», or «*Monad*», which translates to the word "unit" in Modern English. Note that, in the Ancient expression, the qualifier, not the quantifier, comes first!

Yes, the Ancients abstracted, but they did not abstract only generic "quantifiers", such as the '2's and the '4' in the example above. They also abstracted a generic, symbolic qualifier, M, denoting the generic qualitative unit - ontological or metrical - with which every "'well-formed'" abstract quantifier must be paired.

The «*monad*» symbol, or unit symbol, M, could stand for a cabbage, for a cannibal, or for a king -- for whatever the context of the given expression required -- indifferently and 'chameleonically'. This "syncopated" symbol, M, stood for the generic «*Monad*» of Plato's «*Arithmoi Monadikoi*».

It denoted, proto-ideographically, an abstracted metrical unit [e.g., a unit of conventional measure, like a «*stadium*»], or and abstracted ontological unit [e.g., for an individual unit of some *kind* of being, such as a "'philosopher'"] QUALIFIER. This usage vanished in the post-Dark Ages rebirth of Occidental mathematics and science. It was eclipsed in their adoption of a more fully ideographically symbolic [Hindu-Arabic] arithmetic and algebraic notation of abstract quantity, until now - until F.E.D.

What the resulting new, precision «*organon*» of dialectics offers - what the new, Dialectical «Characteristica Universalis» bequeathed to humanity by F.E.D. offers -- is, I think, not the blinding light of a formless, indeterminate and indulgent effulgence. The dawning of such a light, because blinding, is also, still, "*that dark night in which all cows are black*" [Hegel]. It provides no visible navigational specificity, either as a "method of discovery" [Marx], or as a "method of presentation" [Marx], post-discovery. Nor does Q offer a rigid dichotomization -- e.g., of ultra-dense, impenetrable "atoms" versus vacuous void, providing a total void of creative freedom; no scope for novel exploration, nor for intuitive imagination. It is rather, a complex unity of some aspects of the two, and, precisely, a dialectical complex unity thereof, which constitutes, as a whole, an 'Algorithmic Heuristic'.

I have encountered numerous abstract negations, of late, regarding the Capital-relation-shaped ideology in Modern Science, among self-professedly "Marxian" circles. Given the tenor of those [pseudo-]"critiques", I felt that the highest priority -- for the moment -- resides elsewhere than in a direct critique of such extremely anti-Marxian ideologies. All of these pseudo-Marxian, anti-science ideologies bear the markings of the 'human anti-humanism' of the ruling faction of the present ruling class. They demonstrate the potential lethality of the 'anti-psychohistory' of that faction's massive ideology-engineering operations. Those operations are aimed to vitiate, eviscerate, and immobilize any opposition, informed by actual Marxian theory, to that faction's 'humanocidal' plans.

The priority is, IMHO, not a mere critical negation of those negations, but a 'pos-i-tion': positing specimens of the FRUITION of the dialectical, or immanent, critique of Modern Science.

Most of "critiques" of Modern Science I cited above amount to nothing more than an "external" critique of Modern Science. They lead to an "abstract negation" of Modern Science - to "throwing the baby out with the bathwater".

The pseudo-Marxian critics who purvey them say that *there is no* "baby" in Modern Science. They say that Modern Science contains nothing whatsoever that is a product of "universal labor" [Marx]; nothing of universal use-value; nothing "this-sided", no practical truth [Marx, *Theses on Feuerbach*]; no historically-generic social-reproductive efficacy. They say that nothing of these beneficial features exists at all in the Science which the human species has so protractedly created, in co-evolution with our creation, and world-historical elaboration, of the Capital-relation.

Their fundamentally *nihilistic* critiques of Modern Science seek to *externally negate* Modern Science, on '*Naturist*' and '*Animalist*' grounds, leaving only an *indeterminate* "Nothingness".

'Retrojecting' the upshot of such '*externalist*' critique into the past finds the following simile. It would be as if Marx had succumbed to such sub-dialectical, reductionist tendencies, and had simply written, in place of the «*Grundrisse*», and of the four volumes of «*Das Kapital*», etc., etc., the single sentence: "*Bourgeois Political Economy is not a science; it is nothing but ideology.*", and left it at that. I feel sure that there were also whole legions of 'sub-dialecticals' in Marx's time, and before, who did, essentially, just that. We do not know their names. Deservedly so. For, in regard to any actual critique of Modern Science, *they contributed, essentially, "Nothing" to humanity: "indeterminate Nothingness"*.

The chief virtue of *dialectical*, or *immanent, critique* is its "*radicalism*".

Dialectical critique, immanent critique, locates the deepest *root* of the indictments lodged by both the external and the internal dissent from a given, ideology-afflicted science -- or from Modern Science as a totality -- in the innermost core, the very *heart* of that object of critique itself.

It locates that *root* in the most fundamental, «*arché*» category, or concept, residing at the very foundation of that object of critique, from which that ideological science flows/has developed; the "cell form" [Marx] of its totality. It locates that *root* in an 'intra-duality' -- in a '*self-duality*' -- of that very *root* category, or concept, itself.

That 'internal duality' partially vitiates the theoretical and practical grasp of the totality -- here of *Nature* itself, as maximal totality -- that this ideological science aims and claims to comprehend.

Then, this immanent critique unfolds outward from that innermost heart of its object, reconstructing that object as it goes, until the totality of that object has been transformed "'from bottom to top"; "'from inside to outside"; from core to surface; from root to branch to leave.

In that process, what remains 'use-valuable' in what was already explicit within that object, prior to this critique, is *preserved*, and *elevated* into a new and "*higher*" -- i.e., into a *more-inclusive* -- context, where vast treasures of new 'ideo-ontology', of new conceptual advances, that had been locked and blocked by the old object, pre-critique, are evoked, and burgeon into explicitude.

The result is, not an "*abstract negation*", wasting all, and leaving nothing, but a "*determinate negation*", rich in its manifold of new and old determinatenesses.

A specimen of the fruition of such an immanent critique of Modern Science is what I have sought to provide in the enclosed text, entitled --

Meta-Monadology: The Universality Of The «Aufheben» Process.

To synopsise the substance of this text, some of its key, core content is called-out below.

1. Application of the "Natural Dialectors" Arithmetic to Generate Key, Core Content of Marx's «Das Kapital».

The specimen includes a demonstration of how the «arché» category of Marx's «Das Kapital», that of the Commodity, or, more specifically, that of the Elementary Commodity Value-Form, can generate the 'Table of Content' for a Marxian Critique of Political Economy, as a 'Systematic Dialectical' presentation, or «aufheben»-cumulative categorial progression, via the 'self-iteration', or 'iterated categorial 'self-subsumption/self-internalization', i.e., by means of the 'self-reflexive' self-confrontation of that category as an «aufheben» operator, under the rules of the F.E.D.'s Q dialectical arithmetic, as contra "Natural" Arithmetic.

2. The Self-Duality of the so-called "Natural" Arithmetic of the so-called "Natural" Numbers,  $\mathbf{N} = \{1, 2, 3, \dots\}$ .

The "Natural Numbers", the "ultimate cell-form" of all of the mathematical systems of Modern Science, is a one-sided construct. If, in the phrase "3 pounds [of] potatoes", we described '3' as "'quantifier'", 'pounds' as 'metrical qualifier', and 'potatoes' as 'ontological qualifier', it is clear that '3' alone, as in  $\mathbf{N} = \{1, 2, 3, \dots\}$ , is an 'unqualified quantifier'. The suppressed 'intra-dual' to that one-sided interpretation of the root category of "Natural" Arithmetic is an Arithmetic of 'unquantifiable ontological qualifiers'. Such a system is 'contra-thesis' to the '«arché»-thesis' of the 'unqualified quantifiers' system of arithmetic. This 'contra-thesis' constitutes a "Non-Standard" arithmetic, a system of 'meta-"Natural" meta-numbers'. Upon examination, after 'de-suppression', it is found that this F.E.D.-discovered 'counter-arithmetic' fits, and quite spontaneously so, the description of a 'de-Parmenideanized', dynamical and 'meta-dynamical', revolutionized version of Plato's ancient and, until now, mysterious «arithmoi eidetikoi», the «arithmoi» of his «dialektikê». Not surprisingly, it also fits the description of a 'contra-Boolean algebra', of a dialectical logic, as 'contra-thesis' to the '«arché»-thesis' of Boole's arithmetic and algebra for formal logic. This opposite, 'contra-thesis' of a 'dialectical symbolic logic' flows from a deep negation of the axiom that Boole called "the fundamental law of [linear] thought".

It is also found that these new "qualitative numbers" conform to the same four, "first order" axioms, or "Peano Postulates", as do the "Natural" Numbers, although with a completely contrary sense - as F.E.D. has already argued in its extant expositions. Indeed, it is also found that these first four axioms are so universal that both the "categorial progressions" of "systematic dialectic", and the 'systems progressions' of historical dialectic are also described by them; are also 'Peanic'.

This result was foreseen, in so far as the 'Dianoetic' tools of «Verstand» reasoning, and of the 20th Century burgeoning of "Mathematical Logic", can encompass them, via some of the deepest theorems of Modern Mathematics. They are (1) the Gödel Incompleteness Theorem [in conjunction with the Gödel Completeness Theorem, co-applied at the "first order" level], and (2) the Lowenheim Skolem Theorem. Each of these theorems by itself predicted, "non-constructively", the 'constructability' of "Non-Standard Models" of the "Natural" Numbers.

The  $\mathbf{N}$  plus the contra- $\mathbf{N}$  systems of arithmetic go on to find a "'complex unity", or 'uni-thesis'; a 'qualo-quantitative' third category and system in their own Q-modelable categorial-progression /-systems-progression.

That category is the category of a system of 'quantifiable ontological qualifiers arithmetic', called U.

F.E.D.'s dialectic of the dialectical arithmetics, modelable by themselves as such, then burgeons forth from there.

This immanent *negation* of the exchange-value-inculcated, ideological one-sidedness that infects contemporary "'capitalist arithmetic'" brings something *positive* to light. It brings to *positive* fruition an 'ideo-ontologically' expanded, «*aufheben*»-expanded, *qualitatively revolutionized* conception of arithmetic, and an expanded, 'qualo-quantitative' transformation of mathematics in general, in the form of a general theory of «arithmoi».

By this phrase, I take it that **F.E.D.** means a universal theory of those assemblages, «*ensembles*», "sets", or "*populations*" of [*qualitative, heterogeneous*] «*monads*», i.e., of the [*qualitative*] "'*units*", "'parts", "'particulars", "'elements", "'members", "'constituents", or "'individuals", the 'little unities', the 'little wholes' that we encounter, so ubiquitously, at every level, and scale, of our experience and cognition of this «*kosmos*».

3. The "'Set Of All Sets'" and the Immanent Critique of "'Natural'" Set Theory. Set Theory is still oft considered to provide the foundational theory for all of Modern Mathematics. The "'Set Of All Sets'" is the set-theoretical, "extensional" definition of the "Set" idea itself. The [*finitary*] "'Set Of All Sets'" should therefore be the fundamental [idea-]object of a Set Theory that should also, itself, be "'realistic'", or *finitary* and "'constructivist'". Instead, the "'Set Of All Sets'" has been denied and exiled from Set Theory, because of the "contradictions" -- "formal", "propositional" and also 'contental', 'ideo-ontological' -- which the admission of this [idea-]object entails for *undialectical*, 'dianoetic' Set Theory. The immanent critique within this specimen reveals that this set turns out to be: (i.) not a static, noun-like 'idea-object', but a 'self-constructing idea-process', an *idea[ized]* "'process-object'", a '*mental eventity*' whose very essence -- the essence of the Set concept itself -- is self-transformation; (ii.) a Modern, trans-Platonic '[ideo]-«*auto-kinesis*»', and (iii.) a set-theoretical model of the *generic dialectic itself*. The [re-]admission of the "'Set Of All Sets'" into Set theory leads to a deductive «*reductio ad absurdum*»; to a formal-logical self-refutation of 'dianoetic' "'Natural'" Set Theory', by way of the negation of its implicit, formally unstated '*Parmenidean Postulate*', asserting universal '*ideo-onto-«stasis»*'. ...."

We recommend the deployment of this text as follows, as an addition underneath the existing, first Brief on your Briefs Page --

Encyclopedia Dialectica: Briefs

E. D. Brief #1 - The Q, or Pure Qualitative, Dialectical Algebra as <<Characteristica Universalis>>. A Step-by-Step Guide on *How To Use* it as an <<Organon>> for Discovery. By Aoristos Dyosphainthos

- (0) The Q Dialectical Ideography as an Heuristic, Intentional/intuitional 'Calculus for Discovery': *General Instructions*.
- (1) Example. Historical Dialectic - The Dialectic of Nature [The self-<<*aufheben*>> Self-Progression of Natural Systems].
- (2) Example. Meta-System-atic Dialectic - The Dialectic of The Rules-Systems of Arithmetics/Algebras of Logic.
- (3) Example. Meta-System-atic Dialectic - The Dialectic of The Rules-Systems of Dialectical Ideography Itself.

E. D. Brief #2 - Meta-Monadology: The Universality Of The «Aufheben» Process. by Anonymous

1. Part I.: The «*Aufheben*» Meta-Monadology of Platonic «*Arithmoi Eidetikoi*» Dialectics.
  - A.
  - B.
2. Part II.: A Model for Systematic Dialectics.
  - A.
  - ...
  - E.
3. Part III.: Three Models in Historical Dialectics. [not yet transmitted].

We plan to transmit to you Part III. of Brief #2 in due time.

Dialogically yours,

Hermes de Nemores

Secretary, General Council

Foundation Encyclopedia Dialectica

Enclosed herewith -

E. D. Brief #2 - Meta-Monadology: The Universality Of The «Aufheben» Process. -

Part I.: The «Aufheben» Meta-Monadology of Platonic «Arithmoi Eidetikoi» Dialectics.

Part II.: A Model for Systematic Dialectics.

Forthcoming --

Appendices to E. D. Brief #1 - The Q, or Pure-Qualitative, Dialectical Algebra as «Characteristica Universalis»: A Step-By-Step Guide on How To Use It as an «Organon» for Discovery;

E. D. Brief #2 - Meta-Monadology: The Universality Of The «Aufheben» Process -  
Part III.: Three Models in Historical Dialectics.

E. D. Brief #3 - A [Brief] Definition of Dialectics;

E. D. Brief #4 - Dialectical Meta-Axiomatics: A Methodology for Marxian, Dialectical Science;

Concluding sub<sup>2</sup>-sections of Dialectical Ideography, Part I.: Part I. c., Briefings on H( --

• Briefing on the  $\hat{Q}_3 \leftrightarrow \hat{Q}_{QN} = \hat{Q}_U = \underline{U}$  arithmetic for 'quantifiable ontological, or 'ontic', qualifiers';

• Briefing on the  $\hat{Q}_7 \leftrightarrow \hat{Q}_{MQN} = \hat{Q}_{MU} = \underline{\mu}$  [«mu»] arithmetic for 'ontically & metrically qualified quantifiers' [for 'quanto-qualitative' state-variables/control-parameters];

• Briefing on the  $\hat{Q}_{15} \leftrightarrow \hat{Q}_{AMU} = \alpha\underline{\mu}$  [«alpha-mu»] arithmetic for [meta-]dynamical-[super<sup>0</sup>-]systems;

• Briefing on  $\hat{Q}_{31} \leftrightarrow \hat{Q}_{BAMU} = \beta\alpha\underline{\mu} = \beta\underline{\mu}$  [«beta-mu»], for [meta-]dynamical-[super<sup>1</sup>-]systems;

• Briefing on  $\hat{Q}_{63} \leftrightarrow \hat{Q}_{\Gamma BAMU} = \gamma\beta\alpha\underline{\mu} = \gamma\underline{\mu}$  [«gamma-mu»], for [meta-]dynamical-[super<sup>2</sup>-]systems.

Parts II. and III. of Supplement B. to the F.E.D. Introductory Letter;

Revised version of Supplement A., Parts I., II., and III., "re-sync'd." with revised Supplement B.;

Dialectical Ideography, Glossary of Neologia, section for words beginning with the letter 'e';

F.E.D. Vignettes, #1, A Universe that Adds New Classes to Itself:  
Contra-Variations on a Theme of George Boole;

F.E.D. Fractment #2, The Grand Interconnexion: Nonlinearity, Self-Reflexivity,  
«Autokinesis», the 'Ontological Self-Conversion Meta-Dynamic', and  
Differential Equation Singularity.

P. S. Work on Parts II. and III. of *Supplement B*. is on hold. Work on *Vignette #1, A Universe that Adds New Classes to Itself: Contra-Variations on a Theme of George Boole* is also on hold, as is work on *F.E.D. Fractment #2, The Grand Interconnexion: Nonlinearity, Self-Reflexivity, «Autokinesis», the 'Ontological Self-Conversion Meta-Dynamic', and Differential Equation Singularity*. We plan to send these texts to you, along with the other forthcoming items, as circumstances permit.

We also plan to send you further sub-sections of the *Glossary* and 'Precursors' portions of the *Postscripts* to *Dialectical Ideography*, as well as additional *F.E.D. 'Fractments'* and *Vignettes*.

Work is accelerating toward initial distributions of *Part II.* and *Part III.* of *Dialectical Ideography*.