DIDACTIC-REFLEXIVE FORM ERRORS

Legal-ethical, psychological and meta-logical matters of detriment to sound education

2017

Abstract:

There is in existence, in the world of higher education, a methodology upheld by a 'self-modification' rationale that rests on a modified version of Immanuel Kant's 'two sources of awareness' model of the mind (1781, p. 50)[1], a rationale in which that model is consistently attributed solely to Jean Piaget but looking nothing like Piaget's model, which, naturally, agreed fully with Kant's model. Hence there is a disguising of Kant's original authorship of that 'dual cognitive subfunction' model of the mind, the 'cognitive accommodation-assimilation' model, in Piaget's choice of words (1967, p.200)[2], originally expressed by Kant (1781, p.51) as 'attaching objects to and bringing objects under concepts'; all coinciding with factual administrative benefits deriving from the methodology that rests on the rationale that rests on the modified Piaget, who originally rested solidly on the original Kant, though somewhat secretly so, and all of it physically taking place outside of the 'field' we call Philosophy.

[1]*Kritik der Reinen Vernunft*, Riga, Hartknoch

[2]*Biologie et Connaissance*, Éditions Gallimard

Introduction:

Self-modification-based methodologies resting on rhetoric that attributes a quote never written, indeed opposite of the ones written, and the universal disguising of the distinctly Kantian origin of the model of the mind referred to, all coincide with benefits related to the local administration of pedagogy rather than pedagogy itself; with a net loss to Philosophy and no net gain to the alleged target domain in itself, Pedagogy and Ed-Sci.

Meanwhile there is also, within the humanities, ongoing cognitive theorizing by way of ‘denying the antecedent’ argumentation, mental procedures whose derived theories are being applied methodologically within institutions of higher education world-wide, theories and habits corroborated by the coinciding references to the mentioned misattributed model of the mind. And factually coinciding, objectively so, with these instances of panacademic logical discrepancy, surprisingly enough, there is within the perimeter of Philosophy itself a distinctly metadeductive ‘affirming the consequent’ argument in operation, socially and politically influential, indeed detrimentally consequential, by logical necessity.

The verbal constellation of these phenomena serves to underscore the importance of each one of them, inasmuch as their shared quality, all of them being of a distinctly logical kind, tells us that their solutions have things in common too. They are form-

errors which need to be explained together and understood together in order for the detriment of any one of them to be fully understood. Their intertwined state shall be unraveled and the solutions I put forth shall falsify their rationale.

Part I

Peer-exclusion Threat Pedagogy:

Firstly, a most problematic didactic-reflexive form error exists in higher education teaching of pedagogy, where it centers around the post-modern invention of 'self-modification' as an imperative falsely corroborated by conveniently misunderstood and consequently mis-taught early cognitive science – specifically Jean Piaget's 1967 functional model of the mind as Accommodation (letting impressions enter as they are) and Assimilation (making the impressions similar to preexisting cognitive structures); two 'balancing and phenomenologically inseparable constant sub-functions', intercepted and modified by higher education internationally, which uniformly teaches Piaget's model as the balance between two mutually opposing 'incident types' unmistakably recognizable as 'self-modification' and 'stubbornness', and creates examples of the child not yet having the capacity to 'Accommodate', when the truth of the matter with respect to that model is much more one of none of us, according to Piaget and Kant, regardless of age, being capable of doing anything

but both simultaneously and continuously, all of the time. It is an admit-and-repent-theory-driven modified version of essential philosophical history that at the same time says nothing about Piaget's 1967 model in fact being an ipso facto repetition (rephrasing) of the main elements of Immanuel Kant's 1781/1787 model of the mind's awareness (the mind's state of continuously producing awareness of its objects) as the constant unification of the two basic mind-internal sources of awareness: 'attaching the object of observation to' WHILE necessarily 'bringing THE SAME observation under' presently existing concepts.

Piaget's two functional components 'letting enter' and 'making similar' (accommodation and assimilation), naturally, ARE what Kant called 'attaching to' ("ihnen... beizufügen"), as in "the concepts... (i.e. attaching the object in the observation to them)" (to the concepts) ("seine Begriffe ... (d.i. ihnen den Gegenstand in der Anschauung beizufügen)") and 'bringing under' ("unter...zu bringen" in "seine Anschauungen... (d.i. sie unter Begriffe zu bringen)"), which is 'bringing the objects, as instances, under the concepts (/categories)' (Kant, 1781, p.51).

The unawareness of this, in what I call Meta-Pedagogy (higher education teaching of pedagogy) and elsewhere, and the absence of it in the rationale of modern pedagogical practices in general, comes with diverse local methodological implications, including the instruction to all individuals that they 'self-modify' in the

'group', or else – where the 'group' or 'team' is in the center, functioning as the wrench that twists the individual into distinctly unshielded slots where, by convenient coincidence or design, managerial concerns are better satisfied. Akin to it is the threat, in Norwegian higher education courses in pedagogy, to my surprise, by the promise of a distinctly extra-official so-called recommendation letter from the teacher of the course – implicit threats made explicit as the need to "play one's cards right in the group" (team), or else.

In Norwegian higher education courses in pedagogy these threats are reissued in two-on-one talks 'in chambers', quite openly behind shut office doors, whenever individuals need to be 'reminded' – a fact empirically collected by myself, directly, while empirically present, officially as a regular student, unofficially doing my preparatory research, in the bachelor courses within Norwegian Meta-Pedagogy (the field of study called *Pedagogikk*), where these 'two on one' usually explicit threats are officially referred to merely as "study-related dialogues" or just "conversations" and combined with the 'peer-exclusion-threat' style obligatory group work; and all of it openly relabeled and defended with selections from standardized rhetorical menus. It is a 'cooperation'-concept built on the ideal of 'group-autonomy' rather than on Kant's ideal of individual autonomy and a cosmopolitan attitude.

In Norway this is being combined with a universally popular idiosyncratically displayed not slight disdain for the ‘philosophical’ as opposed to the ‘practical’ mind; where ‘practical’ is wrapped in catching slogans and attributed by the speaker to him- or herself, and ‘philosophical’ is attributed to personalities that allegedly are inapt in the more ‘practical’ matters of pedagogy, the counter-example of the allegedly ideal pedagogue, who is ‘practical’ rather than ‘of a philosophical mind’, even if that means being ignorant of the connection, for example, between Kant and Piaget, and hence practically agnostic as to the practical-pedagogical consequences of such a theoretical and philosophical ignorance.

It is a stabbing at Philosophy with no one from Philosophy present in the metapedagogical classroom to set the record straight. It is therefore fair that we bring the awareness of this matter into Philosophy. Nonetheless, Philosophy is itself involved in the generic problem I tentatively call ‘didactic-reflexive’ and ‘formal’ (‘formwise’), thereby implying it is of a logical nature. In linguistics this problem is one of committing linguistic errors while teaching linguistics; in the learning sciences it would be one of employing pedagogically unhealthy methods in the teaching of pedagogy; and in logic it would be deductively invalid reasoning in support of a theory or definition of ‘deductive validity’.

It was in July 2011, during my postgraduate research studies, it became clear to me that a common argument for the deductive

validity of arguments with inconsistent premises is actually deductively invalid. It is a metadeductive 'Affirming the Consequent' argument. We find it in Tidman P. and Kahane, H. (1999) and in Hausman, A., Kahane, H. and Tidman P. (2003, 2007, 2013), in the work *Logic and Philosophy, a Modern Introduction*[3], where the argument fails in multiple ways. On page 75 or 77, depending on the edition, it affirms (as its second premise) a hypothetically observed phenomenon (quality x)* that it first, as a first premise, on page 5, merely claims is a universally observed consequence (by mere universal implication), and makes the mistake of assuming we therefore know that the metadeductive antecedent ('deductive validity') of the initially (on page 5) claimed regularity '*if validity, then quality x*' (Premise 1) is the case.

* - where the phenomenon 'quality x' is observed to 'sort of' be the case in an argument with self-contradicting premises. See *Didactic-reflexive Form Errors* Part V for information on how that metadeductive affirming the consequent argument serves nothing but the appearances of **statistics** and therefore is made for the sake of that benefit - in spite of being absolutely detrimental to the **teaching of logic**, world-wide.

[3]Belmont, Calif., Thompson/Wadsworth

But all that happens between that first premise and the second premise observation 70 or 72 pages later, incidentally, is that the initial conditional that constitutes premise one (from the second line on page 5) through the next three sentences (and three pages later) is misrepresented as a claim of equivalence. Then, on page 75 or 77, it is referred to as if it were equivalence, which it isn't.

A deductively invalid argument, incidentally, is a superordinate statement that is **false**, which would seem to be the reason why Immanuel Kant used the terms "formal (as in formwise) truth" ("formale Wahrheit") and "logical truth" ("logische Wahrheit") in his lecture notes on logic (published 1800 and 1801). What **Kant** referred to with the notion 'logical truth', as he presented "the criteria of logical truth" ("Kriterien der logischen Wahrheit"), which are "the formal criteria of truth in logic" ("Die formalen kriterien der wahrheit in der logik") – under a heading that also addresses the contrast between "material -" and "logical truth" (Kant 1800/1801, Einleitung, VII, pp. 69 and 72 in the 1801 edition) – is actually a combination of what Philosophy today refers to with the terms "deductive validity" and "consistency", a combination that amounts to '**soundness-potential**', where "soundness" is the modern term that refers to 'validity with all true premises', and 'soundness-potential' therefore is 'validity with premises that CAN all be true at the same time'.

In ‘deductively invalid’ reasoning it is in fact **false** that the conclusion is based on, ‘necessitated by’, what the uttered and assumed premises put together dictate. An invalid argument can therefore do harm. I do, for example, view it as quite harmful to argue, as some have tried in the past, with great social-academic success world-wide through two whole decades, that children who study, practice or seek solutions without much or any support of the distinctly “social” kind, so-called “**social** support”, are typically (“*by implication*”, hence ‘by logical necessity’) not of a certain higher class of learners sometimes referred to as “intentional learners”, or not engaging in a certain higher class of learning processes referred to as “**intentional** learning”, perhaps after specifying that “**expert** learners” are “intentional learners” and “expertise” typically **requires** “social support”, and in so doing accidentally appearing to stigmatize all children who study alone – most importantly, one should realize, the lonesomely studying children with good ideas. That error has apparently gone unnoticed in the university world for more than 22 years.

Philosophy could detect and correct this type of errors across the domain-borders within the universal space of university life, and could have detected this particular error long ago, but evidently or apparently does not interfere sufficiently, and did not detect this one; or, we should hope, we would have heard about it – but would we necessarily?

It is in logic itself that we in fact find a curious time-transcending conflict that claims a stake in the shared academic awareness of the present time, but isn't getting it. Upon close inspection, it is quite evident that, since the publication of what I view as Kant's view on 'logical deduction', an adjustment of the common view has taken place; that is, if we suppose the common view of it at one time actually did agree with what I suggest Kant, if we allow such a thought experiment, actually meant by what he in fact said, as far as we know.

Kant's dual component criterion of "logical truth", which I suggest is the real thing with respect to 'deductive **validity**', seems to be treated somewhat as a curiosity of the past. Still, I am not convinced anyone has yet demonstrated fully why the modern modification should prevail. I suggest it cannot successfully defend its prominence with a rationale that is more complex than Kant's; and if that is what it does, then we have a problem.

A lack of 'formwise truth' readily gives away the first of the three absurdities mentioned above – the case of 'metapedagogical peer assessment based exclusion' from one's 'team' during mandatory team-work, and I will give a brief account of it before I move on to the criterion-integral of reasonability and, finally, perform a validity-test of the two arguments just mentioned.

Norwegian Peer-exclusion threat Pedagogy
(in obligatory ‘team-work’),
a legal-ethical logical matter:

In an era of universal participation in the promotion of “diversity”, contradictions appear within a certain type of perspective, contradictions otherwise shut out by institutional walls.

In Norway the norm, virtually a maxim, for the teaching of pedagogy is to have part of the study classified as ‘obligatory group-work’. The universal habit is typically organized by telling the entire class “You shall divide yourselves into groups”, 3-6 members in each. In this arrangement **a device** has been placed, the principle of having each of these ‘**groups**’ be free to continuously assess the cooperation-skills of ‘**its**’ own individual members, during the entire obligatory group-work. The teachers of pedagogy (metapedagogues) make it known that the ‘**group**’ has the right to (is even expected to) **expel** from the ‘group’, or ‘team’, any individual found by the ‘group’ (read: by the majority alliance in that group) to be an ‘insufficient contributor’, or any one whom the ‘group’ finds to be a ‘non-contributor’ – the criteria for which no one has emitted, and no one can, inasmuch as these ‘groups’ work independently, without the presence of any metapedagogue, except for the occasional visit; hence the term ‘**autonomously** working

groups', from which they have construed the convenient notion '**group** autonomy'. In '**group** autonomy' classmates have the 'right' or ability to **formally** expel any individual from the 'team', or, which is the same thing, demand the formal expulsion of any individual teacher-candidate from the 'team'; in **obligatory** 'team-work' – potentially 'vote' on it within the group/team, and then simply call in the metapedagogue, the apparent Mediator, who steps in to 'mediate' while pretending not to be the **designer**, the Instigator. It is a 'designed mechanism', a learning environment **design**, one with detrimental social consequences that no one in the Nordic countries so far has been willing to discuss publically or in domestic academic literature. The mere topic seems to spark aggression rather than rational thinking, though I suppose I should say it is various unfounded assumptions that spark the aggression of a latently aggressive culture intent to protect a status quo.

The following takes place in January of 2009, a typical semester in a typical institute of 'Meta-Pedagogy' ("Pedagogikk") within a typical Norwegian university doing what it usually does in this stage of a study-program, where I was present as an officially enrolled student of Pedagogy, unofficially doing my initial research in preparation of a PhD thesis-proposal (a 3 minute segment half way into the first 45-minute session):

Transcript:

– Lecturer (to the 50-60 teacher-candidates present): "*You are going to divide yourselves into groups*" (**teams**, 3-6 in each, 4-5 being the ideal) ..."*Everyone in the group (team)* ***must contribute****. What counts regarding* ***the ones who do not*** *contribute is they are to be* ***weeded out*** *!*"

[my translation from Norwegian: "*Dere skal dele dere inn i grupper*".. *"Alle i gruppen* ***må bidra***. ***Dem som ikke*** *bidrar,* ***dem gjelder det å luke ut*** *!"* (with the active form of the Norwegian verb 'to weed out'): *"...what counts for them is to* ***weed them out****!"*]

(author reference 2015)

– spoken while stepping forward, bending the upper body forward, reaching to the floor of the lecture hall with the right arm, doing a gripping motion with the right hand, and, on the sound of his phrase "weed out", with a sudden upward motion 'ripping' the simulated 'weed' (the candidate to be weeded out) out of the soil of the imagined garden (out of the mandatory group-work segment) and 'throwing' the imagined 'weed' (the bearer of the **peer-imputed mark** "non-contributor") up in the air and away to the

right, out of the group/team during mandatory group-work.

– Student (myself, hand raised; the lecturer's hand signaling that he will take my question): *"But who gets to be God?" ["Men hvem skal være Gud?"*]

– Silence, then unclear expression of surprise, after which, to clarify:

– Student (myself): *"**Who gets to decide who** it is that isn't contributing?"* ["***Hvem skal bestemme hvem** som ikke bidrar?*"]

– Lecturer: *"The group!"* - i.e. *"**The team**!"* (no hesitation, clearly spoken.) [*"Gruppen!"*]

The entire **threat** is uttered three times: everyone must contribute; the ones who do not are to be '**spotted and dismissed**' FROM the 'team' BY 'the team', by a micro-team of peers (2-5 classmates); "weeded out" on grounds bound to be subjective and potentially highly questionable, from the vessel of the **obligatory** team work. It is obligatory to manage to avoid being excluded - from a micro-team of classmates who in fact are allowed to exclude you - in order to pass the course; obligatory to manage to remain a 'member' in a micro-peer-group allowed to dismember itself of you, throughout the course, in order to 'pass' the course. The 'team-work' being obligatory is in itself an easily rationalized

element of a learning-environment, one that sounds reasonable; though embedded in a method-scheme that involves an obligatory "manage to avoid a potential exclusion by peers allowed to exclude you" task it turns into something quite different. The verbally and visibly explicit threat was repeated verbally, twice, before the first 45-minute session of the lecture ended, in one of Norway's institutes of pedagogy, institutes that all have the same practice (and have verified it in dialogues with myself), a practice operated by a set of principles that are identical throughout Scandinavia (verified in dialogues with Norwegian and Danish institutes), and I suspect are identical in the rest of the Nordic nations as well.

A tracing of the reasoning underlying the exemplified threat leads nowhere, but an analysis of the functions of the threat renders its benefit. The metapedagogue who reappears when called upon – perhaps by a team-member experiencing discrimination of his or her contribution by a dominant or socially aggressive individual within the team, or by a member threatened by the dominant or majority alliance – now appears to assume the position of pseudo Mediator, his or her function as ipso-facto Instigator having now been completed.

It is a conveniently feigned powerlessness we see demonstrated by the reappeared metapedagogue from this point on. The benefit is a decisive pressure on non-alliance-grabbing non-consenting individuals to keep relevant insight that might be construed as

‘differences of mind’ secret; a threatening pressure against any non-allied individual not consenting with a discrimination-operator who gathers the passive members into a dominant alliance and uses the alliance to ‘vote’ away individuals with better insight than they have themselves instead of having the team capitalize on it. It is a distinct pressure towards expressing ‘consent’ when there is no such thing and no rational reason to express that there is, other than the need to avoid being excluded by the 2-5 peers being allowed to decide whether you should have the right to reach the official exam stage or not.

It is an analytically quantifiable entity that is hermeneutically **analyzable** to the requirements of science, but quite **uncountable** ‘perception-quantitatively-wise’ (by counting perceptions) on account of the paralyzed state of such young minds, unable to realize what is indeed being done to them, and in this case and every other case I have observed under similar conditions, in Norway, obviously willing to ‘tick-a-lie’ to themselves on whichever ‘Likert-scale tick-form’ anyone might have served them at the time. I suggest three things are certain: It is in its very essence unlawful in Norwegian Meta-Pedagogy; it is against human rights, and it is unhealthy.

Then, I suggest, there is this – the determining principle of duty and right:

Every duty

implicates

a reciprocal right.

With the '**duty**' to participate comes the '**right**' a)to participate and b)to be assessed by objectively verifiable criteria, supplied by subjective criteria only where these may satisfy universal criteria (meta-criteria) of randomness of such subjectivity. The latter dictates a collective risk population where no single student can be picked out for **pre-exam**-stage extra-examinations that one may avoid by hiding in the crowd of consensus – pre-exam extra-examinations aka 'listening-in'-visits by special 'internally felt **doubt**'-**triggered** institute-employees used as agents to target the 'doubtee' only), exclusion-ceremonies officially validated by expressed "doubt in candidate" (document samples secured by the author).

That particular '**peer-weed-out**' threat, incidentally, will necessarily continue to haunt these individuals as they move into Pedagogy, as teachers of children, organized in so-called 'teacher teams', the control mechanism universally imposed within the workplaces of Norway's schools; teacher teams ordered to '**cooperate**' while being allowed to '**self**regulate' in the work-place but which instead, as I prefer to put it, are teams each of which is controlled by its socially dominant **alliance**, who then 'regulates' the **unaffiliated** individual 'group-member-**self**' and expels the

non-allied dissenter without ‘**it**self’ being regulated – indeed without even being taught the bare minimum of team-ethics, and consequently not being subordinate to a monitored and upheld set of rules for healthy and efficient team-work, rules designed to protect individuals from the potential of unwarranted censorship and threats posed by an alliance out of control or by a socially aggressive member backed by an alliance.

It is a learning-environment design where ‘the right to **participate**’ currently is defined implicitly as the mere right to be present and speak until stopped by someone, even when that someone is someone who grabs censorship with absolute dictatorial power to discriminate and threaten a perceived ‘enemy’ by mobilizing the ‘peer-weed-out’ mandate. That is the extent of the possibility afforded to ‘the self’ for the realization of its ‘**self-regulation**’ within this particular learning-environment design, a distinctly Nordic design. Its problematic element derives from the absence, in a “free higher education” environment, of what in most other parts of the world is an **economic** incentive to keep a fee-paying student mass intact at least until the exam stage of each course and to inspect practical performance by an elaborate random subjectivity that approximates objectivity to as high a degree as logically possible. Many examples of such random subjectivity schemes for assessment can be found throughout the world, schemes void of certain properties that in Norway have been

developed for the maximization of the learning-environment design's potential as a **pre-exam sifting-** and screening-organ implanted **between** a)the police- and health-record hurtle and b)the week or two of collectively held exams for everyone at the end of each course.

That particular learning-environment-design is a natural opinion-sifting organ within Ed-Sci - a social sieve-operator - that naturally fails to limit its involvement to matters validly addressed by national security-, law- and health-authorities. It is, hence, a very dangerous one to leave alone in any culture, let alone a culture void of the mentioned **economic incentive** towards objective and '**random** subjectivity **limited**' assessment naturally present in the more capitalism-oriented student-fee-funded higher education of what seems to be the rest of the world.

Part II:

Kant's and Wittgenstein's Criterion-Integral of Validity is NOT the presently taught

Let me introduce the next perspective by suggesting Immanuel Kant's "logical truth" was and is his idea of 'logical validity' rather than the result of having added something to validity, the way modern theorizing tacitly arrives at the sum of 'validity' and 'consistency' being 'the compound quality that allows soundness'

(“sound” meaning free from injury, healthy, firm, strong, cf. Scribner-Bantam; and “validity”, Latin for strength, virtually being a semantic synonym), “validity” and “soundness” then being a quasihierarchical naming that applies similar sense in the forming of two more or less conceptually separate properties where the attaching of ‘consistency’ to one of them, nonetheless, is a criterion of the other, tacitly speaking the concept of ‘soundness-potential’, and “speaking” Kant’s concept ‘logical truth’ “into” that concept – that is: “bringing” Kant “under” the concept tacitly spoken as ‘soundness-potential’, and, I suggest, breaking the spine of ‘validity’ in the ad hoc subjugation of it by the more modernly imagined concept.

I see no evidence that would lead me to deem it reasonable to charge Kant of such a blatant irrelevancy as it would necessarily be to compose lectures in logic that discuss the inherent reasonability of ‘logical truth’, unless he by ‘logical truth’ meant ‘reasonability-wise strength’ and saw that type of ‘strength’ to have the precise same pragmatic and philosophical relevance that theorizers now project onto the notion ‘reasonability-wise validity’, logical (deductive) validity. It is the assumption of that irrelevancy - as constituted by the opposite claim - that must be explained before it can be believed. In the absence of such evidence-based explanation I suggest Immanuel Kant’s dual component criterion of ‘logical truth’ is the best, most useful and simplest, hence the

universally most operable, validity-concept imaginable, for all of humanity; that Kant's 'logical truth' in fact is his 'logical validity' and therefore is what he says is OUR 'logical validity'.

Imagine, for a moment, that Immanuel Kant's 'validity'-concept (his 'deduction-wise strength') is precisely what we see in the lecture notes he had his colleague Dr. Jäsche edit and publish for him (Kant: *Logik, Ein Handbuch zu Vorlesungen*, 1800),[4] the "logical truth" ("logische Wahrheit"), the "formwise truth of the awareness" one has ("formale Wahrheit der Erkenntnis"), characterized as the awareness "being voiced together with itself"/"voiced as one with itself", which is "being of one voice

with itself" ("Zusammenstimmung -"/"Übereinstimmung der Erkenntnis mit sich selbst"), 'in agreement with itself' – the component criteria of which he says are: 1)logical possibility ("logische Möglichkeit"), a rule he calls "the contradiction rule" ("der Satz des Widerspruchs"), which demands: "that it be logically possible; that is, that it not contradict itself" ("daß es logisch möglich sei, d. h. sich nicht widersprecht"), verified by a simple **consistency**-test, which would then be the first part of the "reduction to absurdity" of any deductively valid argument; and 2)logical reality ("logische Wirklichkeit"), a rule he calls "the rule

---

[4]Königsberg, Friedrich Nicolovius/Gottlob Benjain Jäsche

of sufficient ground" ("der Satz des zureichenden Grundes"), which demands "logical coherence", the logical "hanging together" ("Zusammenhang") of the awareness one has, whatever it be about, with the "grounds" and uttered "consequences" ("den logischen Zusammenhang eines Erkenntnisses mit Gründen und Folgen"); which is the property of logical '**necessity**', verified indirectly by reversing the conclusion and testing for INDUCED self-contradiction in the conjunction of all the sentences in that counter-example set (the test-set of the argument to be indirectly tested; sentences which, if the argument is deductively valid to begin with, can no longer all be true at the same time).

If what we just imagined were actually so, then it would be reasonable for us to say that: Only if the conjunction of all the sentences (the premises and the conclusive assertion) in an argument was **not already** a self-contradicting conjunction before we test-reversed the conclusion (the 1st component criterion met) CAN the argument BE valid (logically true); and, assuming the argument already meets the 1st criterion, the following holds as well: only if the conclusive reversal MAKES it self-contradicting – its counter-example set being absurd (2nd component) – is the possibly valid ACTUALLY 'valid' (actually logically true). In short: only the non-absurd arguments CAN be valid, and only the non-absurd that become absurd when the conclusion is reversed ARE valid.

Let us keep imagining, for a moment longer, that this is what Immanuel Kant actually, hence also possibly – inasmuch as ‘actuality’ without ‘possibility’ is meaningless – says in these lecture notes. Would there then be corroborating evidence for what we have just imagined, and which I suggest isn’t merely an odd possibility but a lucid actuality ? I suppose it is no secret that I see substantial corroboration, and I hope this bias of mine might encourage others equally philosophically curious to entertain this thought and deem it as something more than a mere curiosity.

I suggest Wittgenstein agreed with Kant’s judgment that the $\{(p \cdot \sim p) \supset q\}$ structure is not among the ones that have “logical possibility”, where “logical possibility” in Kant’s vocabulary means that it not contradict itself. The idea that {because $[(p \cdot \sim p) \supset q]$ only says that [if “*p*” and “*not p*” WERE both true at the same time, then “*q*” would be true too], the $[(p \cdot \sim p) \supset q]$ structure is therefore valid}, is preempted by Kant and explicitly rebutted by what he calls “the contradiction rule”.

The very vocabulary of modern logic is equipped to disguise this, but we see the disagreement with Kant where the vocabulary of modern logic ambiguates itself: in the notion of an argument with self-contradicting premises necessarily being ‘**unhealthy**’ but allegedly being ‘**strong**’, which in fact is the meaning of “unsound but valid”, the phrase I suggest Kant says falsifies the paradigm it is part of.

For an argument to be ‘logically true’ – or, as we now, as an experiment, say it means, ‘valid’ – according to Kant, it must be ‘**possible** for it to be sound’, hence ‘possible for it to have all true premises’. The first component of Kant’s criterion of “form-wise truth” – of his notion of ‘validity’ – is of total relevance under this assumption of ours. Treating it as a mere criterion of ‘possible soundness’ and nothing else, even if only implicitly, does not change that. The **dual** component criterion is the definition of ‘logical validity’ that I see as the least complex. It is ‘structural vulnerability in a non-absurd argument structure’ - and I wrote that, with a similar phrase, in a letter to a Norwegian university dean in 2008, after 4 months of logical training, viewing it as that obvious; in my naivity not knowing Kant wrote it more than 217 years before I did.

Disagreeing with Immanuel Kant evidently complicates matters so much that one is tempted to argue meta-deductively with deductive invalidity. The departure from Kant’s **dual** component criterion-**integral** has placed a burden on modern logic that modern logic evidently cannot carry, the burden of explaining itself. We see it in the occasional examples of implicit ‘affirming the consequent’ argumentation ‘for guilt’ among lawyers and judges, or implicit ‘denying the antecedent’ argumentation ‘against risk’ among nurses and medical doctors. But it is not the ‘voting’ on whether logic is ‘boring’, ‘abstract’ or ‘mostly for the predominantly non-

practical of minds' that will decide. Truth is what decides, and I suggest it already has.

Wittgenstein goes further and speaks of the "truth-possibilities" ("Wahrheitsmöglichkeiten", TLP,[5] 1921, §4.431-6.1203) of compound sentences, including conditionals, where modern theorizing merely teaches the notion "truth", while saying little about having 'corrected' or 'differed with' Wittgenstein, who I think must have agreed with Kant. No one seems able to properly justify the modern modification of Wittgenstein's 'truth-possibility' or Kant's 'logical possibility-and-actuality' criterion-**integral** of the reasonability-strength he imputed to logical truth. I don't suppose anyone can.

Kant's 2nd component is the criterion of 'the consistency-wise possible (the ones that already meet the 1st) being a logical reality', which is met if the grounds of the 'consistency-wise **possible**' "**fully reach**" (suffice). The notion 'real', in other words, is made dependent on the 1st component already being met: that the argument, as a compound 'awareness', is indeed possible, that it has 'no self-contradiction'. We are led to acknowledge that we are

---

[5] Ludwig Wittgenstein (Tractatus Logico-Philosophicus, 1922) "Logisch-philosophische Abhandlung": in *Annalen der Naturphilosophie* (1921), herausgegeben von Wilhelm Ostwald, vierzehnter Band (issue 14), Leipzig: Verlag Unesma G. M. B. H. pp.185-262

dealing with a conceptual **integral** that does not exist except when both component parts are intact.

Nevertheless, all now seem to agree that logical validity', 'deductive validity', is the property that stands up to a version of the validity test that jumps straight to the 2nd component criterion, and all seem to accept the way 'consistency in the premise structure' is placed in the 'spare parts box' and tagged "relevant to soundness". Some even move to conceptually '**draw out**' the consequence that arguments with contradictory premises are 'deductively valid', and drawing it merely from {P1:if an argument is deductively valid, the conclusion is always true WHEN the premises are all true and P2:in arguments with contradictory premises the premises are NEVER all true} – which I suggest is a blatant 'Affirming the Consequent' argument and nothing but that, to be analyzed below – but not even that seems to scare the logically curious masses back to Immanuel Kant.

Part III:

Metacognitively 'Denying the Antecedent'

C. Bereiter and M. Scardamalia's 1994-argument for 'social learning' is logically invalid

The reasoning by Carl Bereiter and Marlene Scardamalia in 1994[6] needs to be analyzed. They actually said that since 'expert learners' are 'intentional learners' and expert-like learning typically requires 'social support' we therefore know, or we know "by implication" from this, that intentional learning too typically requires 'social support'. If this is a logically invalid argument, then it is in fact a false claim, a claim that there is logical necessitation between premises and conclusion when there is in fact none.

In natural language the argument is (p.266):

{1:} "Among students, the process of expertise manifests itself as intentional learning." {2:}"The process of expertise is effortful and typically requires social support." "By implication," {3&4:}"the same is true of intentional learning."

---

[6]"Computer support for knowledge-building communities", *The Journal of the Learning Sciences*, 3(3), Taylor & Francis, UK, USA 1994, pp. 265-283)

The superordinate statement is: “By implication” from {1} and {2}, {3&4:} Intentional Learning too typically requires social support} – that is, we ‘therefore’ know it; we know it ‘because the offered premises say so’.

But is that superordinate statement “... By implication ...” actually true? The analysis of that argument is straightforward (Verbal Figure 1).

The phenomena:

Es: a student being ‘Expertlike’

Is: a student being an ‘Intentional learner’

Ss: a student having ‘Social Support’

The argument:

{*If* 1: {[*Es implicates Is*] *and*

2: [(*not Ss*) *implicates* (*typically not Es*)] *and*

3: [*an assumed instance of not Ss*]},

then, “*by implication*”

/.. (Concl. Assertion:) 4: [*typically not Is*]}

Verbal Figure 1

The asserted conclusion is:{4} The student is then, “by implication”, typically not an intentional learner – that is, not as ‘good’ or ‘intentional’ a learner as the “social support” equipped.

The reasonability of the claim that the conclusion {4} follows "by implication" from the premises is objectively confirmed or falsified through a standard 'reduction to absurdity' test, easily done in the form of a so-called 'short-cut' test method, as follows:

We present what I call the argument's 'test-form' – the act of simulating the opposite conclusion, and then perform a 'test-reading' of the structure, which is now the 'counter-example' instance of the argument form, to see if the structure then BECOMES absurd (Verbal Figure 2).

Observation:
{1} *Es* *implicates* *Is*
F/T T.Poss. T

Observation:
{2} *Not Ss* *implicates* *not Es* ("*typically*")
T T.Poss. T

Assumed instance:
{3} *Not Ss*
T

/.. Asserted conclusive compound implication:
{4} *Not Is* ("*typically*")
F T – invalidly asserted

Verbal Figure 2

The argument is:

{1}**If** one is an '**Expert**' student, **then** one is also an '**Intentional**' learner.

{2}But, without 'Social' support, then, typically, one is not and 'Expert' student.

{3}A particular student is hypothetically or actually without 'Social' support.

{4}"By implication" from {1-3}, typically, that student is **not** an '**Intentional**' learner either.

Another argument with the same form is:

{1}**If** one is a **Vegetarian**, **then** one is also **health-conscious**.

{2}But, without a certain type of support, then, typically, one is not a vegetarian.

{3}A particular person is hypothetically or actually without such support.

{4}"By implication" from {1-3}, typically, that person is **not health-conscious** either.

They are both a disguised 'Denying the Antecedent' argument. The argument may have true premises, sentences {1-3}, but the conclusion, sentence {4}, which refers to {1-3}, cannot be true when we include in it the main logical operator, '**because**' or 'by implication', and the reason why it cannot is because it builds on the act of **negating** the Antecedent in {1}, a negation deduced from {2: '... then not an Expert'}. The conclusion builds on the Denied Antecedent of {1} by saying "By implication", before **negating** the Consequent in {1}. The whole argument, in other words, is nonsense, objectively speaking. The verdict on it is objective, not

subjective. It is objective because logic is objective.

In this case the conclusion speaks of a **logical certainty** which the premises {1-3} do not allow. Not only do they not allow that certainty, they explicitly forbid it - because the doubt is spoken when the set of premises is spoken. The conclusive doubt is objectively present in the set of premises. It is a logically present doubt, **logical doubt**.

Part IV

The test-reading of 'logical doubt'

To simulate the opposite conclusion we either negate the Asserted Conclusion "*Not Is*" or test-valuate it as 'False' (F) and see what happens when we also imagine or test-valuate each premise either as 'True' (T) or having "truth-possibility" (T.Poss.) (Verb.Fig.2). It is when the structure 'becomes absurd' by testing it – or, in other words, it is when the counter example is definitely absurd (phenomenologically impossible) while the argument structure is consistent to begin with, non-absurd – that the argument structure has 'logical truth', which we already rather successfully imagined to actually be Kant's way of saying 'logical strength', hence 'validity' (1800/1801, quoted above); and there can be no 'actuality' without 'possibility'; meaning only the non-absurd is POSSIBLY 'valid', if Kant was actually talking about

‘validity’.

This is where modern works of logic assign an unmistakably ‘certain’ truth as they refer to the “truth” of so-called “conditionals” (sentences like “*Es* implicates *Is*” or “*p* implicates *q*”), but where Ludwig Wittgenstein too differs with modern description of logic and refers to the ‘truth-possibility’ of the whole sentence, here {1}, relative to the ‘truth-possibility’ of each subordinate sentence in it, here “*Es*” and “*Is*”, and discusses whether the whole premise, here {1}, has ‘truth-possibility’ if the antecedent, here “*Es*”, is assumed false (F), which it definitely does: Sentence {1} remains possibly true because, in a conditional statement, a consequent phenomenon, here [*Is*], is not claimed to depend on the antecedent, it is just claimed to co-occur with all occurrences of it, and the **absence** of the antecedent phenomenon, here [*Es*], in no way stands **in the way** of the possibility of the consequent phenomenon, here [*Is*].

The truth-possibility (T.Poss.) of {1} is unaffected by “*Es*” being assumed to be false (F), the type of logical consideration here being ‘agreement with possibility’: ‘whether the **truth** of the compound “*Es* implicates *Is*” is in agreement (“of one voice with”) or disagreement with “the truth-**possibilities** of the elementary sentences” (“Übereinstimmung und Nicht-übereinstimmung mit den Wahrheitsmöglichkeiten der Elementarsätze” – prop. 4.431 in L. Wittgenstein’s “Logisch-philosophische Abhandlung”) – that is,

in this case, whether the possibility of a true sentence {1} is in agreement, most importantly, with the eventuality of a false (F) antecedent "*Es*", and the answer is yes; because an absent antecedently asserted matter-of-fact, here the absence of the phenomenon [*Es*], a *student* ***becoming an Expert***, in {1}, does in fact not logically exclude the possibility that the body of '**Intentional** learners' is much larger than the body of 'students who are or become **Expertlike**', hence does not logically exclude the possibility of that other matter-of-fact, here [*Is*] - the student being in the higher class of learners referred to as ***Intentional*** *learners* - still being the case.

The authors do not and cannot claim equivalence between the two, which would amount to saying that being in that higher quality learner category is logically equivalent to being one who becomes or even aims towards being an 'expert', which they, with apparent accuracy, do imply is one who behaves with **automated** efficiency in some subdomain; the quite opposite of the much defamed (by Belbin's 'team-role'-paradigm and elsewhere) 'analytically' or 'philosophically' minded student, which is a team-member-type taught by Scandinavian Pedagogy as a problem, one who obstructs the team's efficiency when not subdued and counter-balanced by the more "**preferred** team-roles" described as the charismatic and practically minded, who never need to be subdued and (allegedly) save the team from the analytically and the philosophically inclined

within the team - a potentially sinister stigma to impose on teachers of children, I'd say.

So, no **absent** antecedent phenomenon of a claimed universal regularity can in itself be said to logically **stand in the way** of the associated consequent phenomenon; cannot be reasonably claimed to logically obstruct its possibility; whether the antecedent be a resource, a pathogen or a non-cause variable.

We then look at sentence {2} and judge whether the possibility of it being true (T.Poss.) has been cancelled out. It has not, provided its consequent, "*not Es*", is still assumed to be true (T), which we already have assumed inasmuch as its antecedent, "*Not Ss*", has already been determined to be true (T) by the last premise, sentence {3}: the observation or, in this case, assumption, of a student who has not had much "Social" Support in his or her learning process, or none at all – the child that Bereiter and Scardamalia, in this 1994 article, theorize as "typically not intentional learners", "by implication" from sentence {1} and sentence {2}. This particular argument-type rhetoric has been taught within Meta-Pedagogy for over twenty-two years, through the article, which is still being studied by entire classes of future teachers, world-wide – in the field called 'the Learning-Sciences' or 'Educational Science', a field that once used to be treated as if it belonged to Philosophy but lately, quite evidently, has been somewhat shielded from its influence.

I suggest we voice the logical doubt that in fact exists within that premise structure in itself, where the authors in fact claim that it is logical necessity that dictates the conclusion, a necessity-claim they express through the words “By implication, {3:}the same {4:}is true of intentional learning”. The logically valid conclusion is here that no such conclusion follows from the stated premises. Sentence {4} does in fact not follow by implication from {1}, {2} and the logically converted (part of ‘requires’) {3}.

An easier way to read the line of reasoning is to begin with sentence {3}, then read sentence {2}, and then {1}, and label the claimed phenomena in that sequence (*p*, then *q*, then *r*) (Verbal Figure 3).

{1} *q* *implicates* *r*
F/T T.Poss. T

{2} *Not p* *implicates* *Not q* (“typically”)
T T.Poss. T

{3} *Not p*
T

/.. {4} *Not r* (“typically”)
F T – invalidly asserted

Verbal Figure 3

Part V:

Metadeductively 'Affirming the Consequent'

P. Tidman, H. Kahane and A. Hausman's

argument

for a theory of logical validity

is logically invalid

It is worth repeating that – according to what we have now imagined, as an experiment and quite successfully, that Immanuel Kant actually meant by what he actually said in 1800 – it is when the counter-example is absurd (2nd component criterion met) and the argument structure is consistent to begin with, non-absurd (1st component criterion met), that the argument structure has the property we may reasonably call deductive truth or deductive validity.

In our experiment we have now read Kant's criterion-integral, in which it is an argument's logical possibility (the consistency of its set of sentences, 1st criterion) and reality (the coherence that makes the counter-example absurd, 2nd criterion) that constitutes deductive 'truth' – assuming, as we do in our experiment, that the expression "formwise **truth**" indeed is Kant's way of referring to the most relevant 'structural strength' in this context, and which he implicitly says indeed is the most relevant '**validity**' to speak of in logic, inasmuch as it is a 'strength' he **exemplifies** by referring to

the ‘negatively and indirectly’ arguing structure ‘**modus tollens**’ (the example of the way the North Star not being at a constant angle above the horizon allows certainty in the logical deduction that neither is the Earth flat) and the ‘positively and directly’ arguing structure ‘modus **ponens**’ (which he says is the method we resort to when we infer from past consequences to new merely ‘probable’ conclusions that are ‘hypothetically true’). The possibly annoying fact I am pointing at is that from the logical fact Immanuel Kant expresses through his dual component criterion (1800/1801), modern theorizing has taken away the first element, thereby repairing what I suggest is in no need of repair.

Leading academics even argue specifically for the ‘deductive validity’ of ‘all argument structures with self-contradicting premises’, among which are Tidman, Kahane and Hausman (*Logic and Philosophy, a modern Introduction*, 1999-2013),[(3)] who not only argue for it but do so with a deductively invalid argument, an ‘**affirming the consequent**’ type of argument about deductive validity; a deductively invalid metadeductive argument moving from the starting point of a mere observation, on page 5 in the book, of ‘all valid arguments’ having the property of [the conclusion having to be true IF all the premises are true], and seeing that property present even when the premises CANNOT all be true on account of contradicting one another, a property which they, on page 75 or 77, depending on the edition, say is present in

all arguments with self-contradicting premises, arguments they say are **therefore** "deductively valid".

The property, in an argument structure, of [the conclusion necessarily being true WHEN or IF all the premises are true] – let us call that "Property x", for the sake of brevity – is a starting point the authors phrase as follows, on page 5 (as schematized in Verbal Figure 4 below) – Sentence {1} (Premise 1):

> "The fundamental logical property of a **deductively valid argument** is this: [If all its premises are true, then its conclusion must be true.] [x] "

"Fundamental"

The meaning of {1} rests on the meaning of "**fundamental**". What does it mean to be "fundamental" in this context? In short, "fundamental" is defined as a reference to 'that which upholds' rather than 'that which constitutes', hence means 'supporting x' rather than 'constituting x'. If "the fundamental" means 'the foundation" or "primary", then it refers to 'the first ingredient' rather than 'all'; specifies 'the beginning' and says nothing of the end limit of the ingredients that go into what constitutes 'validity'.

In that semantically and etymologically paradigm-compatible and logically consistent sense, "fundamental" refers to ' **sufficient** for the **beginning** of ' rather than 'sufficient for the **constitution** of that which it is the "foundation" or "fundamental" of, here

deductive validity'. So, if we were to say the "fundamental" is all we need in order to call something the "constitution" of that which it is the "foundation" of, we would be operating an inoperable semantic variable, a contextually non-relating notion.

If we then immediately, in the next sentence (as in the 12th ed., 2013) or almost immediately, in the next paragraph (editions until 2013), refer back to it as if it said something other than what we could meaningfully have referred to, as in {1}, we should hope to be found out; unless we, bound by a desired end clause, actually intended to - dressing our explicit initial logic up in a sonar suit that paradigmatically pertains merely to 'the **beginning** of that which constitutes' but not really 'meaning' it and proceeding to pretend otherwise, as in {2-3}, and then hoping the logic of it is forgotten by the time we refer back to it to prove how an absurd premise structure forms a 'valid' argument, as in {4}, in so doing forming an invalid argument about validity. It is an argument form the authors themselves 15 pages later say is 'invalid', the one we call the 'affirming the consequent' argument.

The facts need to be displayed before we proceed, in order to allow the reader to take part in the logical judgment. These are the two initial paragraphs on page 5 of *Logic and Philosophy, a Modern Introduction* until 2013, where the segments I marked {1},

{2} and {3} are the meta-deductive they build on 70 or 72 pages later; where the words I marked in red were changed in 2013 (the 12th); and where the italics and bold are as in the quoted work:

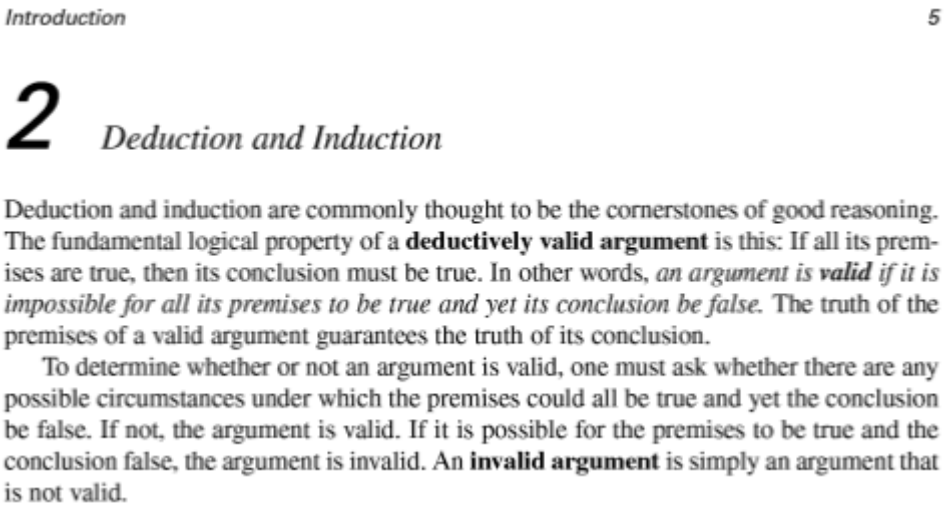
“

Deduction and induction are commonly thought to be the cornerstones of good reasoning. {1}The fundamental logical property of a **deductively valid argument** is this: [If all its premises are true, then its conclusion must be true.] [x] In other words, *an argument is **valid** just in case it is impossible for all its premises to be true and yet its conclusion be false*. The truth of the premises of a valid argument guarantees the truth of its conclusion.

{3} To determine whether or not an argument is valid, one must ask whether there are any possible circumstances under which the premises could all be true and yet the conclusion be false. If not, the argument is valid. If it is possible for the premises to be true and the conclusion false, the argument is invalid. An **invalid argument** is simply an argument that is not valid.

”

(the 12th edition change marked in red:) “..... In other words, *an argument is **valid** if it is impossible for all its premises to be true and yet its conclusion be false*. ...” (12th ed. insert:)



Introduction 5

2 *Deduction and Induction*

Deduction and induction are commonly thought to be the cornerstones of good reasoning. The fundamental logical property of a **deductively valid argument** is this: If all its premises are true, then its conclusion must be true. In other words, *an argument is **valid** if it is impossible for all its premises to be true and yet its conclusion be false.* The truth of the premises of a valid argument guarantees the truth of its conclusion.

To determine whether or not an argument is valid, one must ask whether there are any possible circumstances under which the premises could all be true and yet the conclusion be false. If not, the argument is valid. If it is possible for the premises to be true and the conclusion false, the argument is invalid. An **invalid argument** is simply an argument that is not valid.

The assumption of having derived validly at **equivalence** between **validity** and the "fundamental" property I marked [...]^{x} is repeated on page 8 and the matter not touched on until capitalized on in the meta-deductive argument 70 or 72 pages later, depending on the edition, all editions saying – where I mark property x as [...]^{x} and the whole paragraph as meta-deductively relevant segment number 4:{..}, though it is actually stated three times in that paragraph, the last time with an explicit reference back to the beginning of their discussion of validity, which is on page 5, as quoted above, telling us here to "**Recall**" that initial segment. So, the authors move from {1-3} on page 5 to this on page 75 or 77 (**my bold**):

4: "{ We can now say that for an argument to be invalid is **just the same as** [for its counterexample set to be consistent]$^{\text{not x}}$–that is, [for the conjunction of the premises together with the negation of the conclusion to be consistent]$^{\text{not x}}$}. Put in terms of validity, an argument is valid **if and only if** [the conjunction of the premises together with the negation of the conclusion is inconsistent]^{x}. Recall that a valid argument is **defined as** any argument such that it is [not possible for its premises to be true and its conclusion false]^{x}, which amounts to [it not being possible for the premises of the argument and the denial of the conclusion all to be true]^{x}. } "

- where "**just the same as**", "**if and only if** " and "**defined as**" are synonyms of the "**whether or not** ..., **whether** ..." in segment {3} on page 5, all saying {validity is **equivalent to** [property x]

based on {1} and {2} only; {3} then syntactically building on {2}, which claims to be {1} only "in other words". It is a quite formidable error, a quite elaborate attempt to get around the principle of not concluding by affirming a consequent. Affirming it they do, nonetheless, in {4}, and put the entire weight of the continuation solidly on it, by claiming {1} and {2} and {3} are how they "**defined**" validity and telling us to remember it, to "**Recall** that a valid argument is **defined as** ... [...]^{x} ".

No such stone as the 'definition' they refer to is to be found on the riverbed between sentence {1} and segment {4} 70 and 72 pages later. Staking their stave, then, on the imaginary and telling us **what to** "**recall**" **it as** (a definition) as they leap off the bank is a very bold move indeed. The boldness of it has blinded their opponents into submission to it. But I saw their **implicit** affirming of the consequent in {1} in the move from {1 and 2} to {3} the very first minute of reading page 5, on day one as a logic-student in January of 2008; and 29 months after that, hidden as it is in plain daylight, I saw the subsequent **explicit** affirming of the consequent in {1} by the conclusion in {6} **resting on** {4}, which **rests** on {3}, which **rested** on nothing, but since 2013 has rested on {2}, which until 2013 **rested** on {1} by repeating it but now falsely claims to do so, because it is now opposite of {1}, a sentence that I all along saw is a mere conditional - 'validity implicates property x', fully '**fundamental**' or not. Confusing? You bet it is, a decades old trap

that caught all of higher education and still keeps it tranquilized.

The limitation imposed by the logic of the word "**fundamental**" in "The fundamental logical property" is used initially, in {1} on page 5, as if to have a prevalent fragment **sound** in retrospect (70 or 72 pages later) as if a **conclusion** by affirming the consequent mentioned in {1} somehow magically rests on a naturally occurring original regularity, as in '**all apples** have the property that they fall when not connected'. The humorous property of "**therefore**, if we see something unconnected and falling, **it's an apple**" is no more fundamental than that of the "**therefore** - because of the fundamental property of a valid argument being [property x] - if you hear one with that property x , **it is valid**" !; meaning: if you come across one and in it **verify** the property referred to in sentence {1} as a universal **consequent** of 'validity', then the 'affirming the consequent' argument we then form would inform us that the one you came across is 'valid'. Naturally, this is a mistake. The authors tried to mend it by patching their sentence {2} in the 12th edition so that it may connect {1} validly with {3} (page 5). But naturally, it cannot be done.

If the 'all apples' case looks oddly funny, it is the naturally occurring mental response of reacting with bewilderment to logically invalid reasoning, but our basic sense of reason may defend itself by switching itself off and allowing memory to take over, especially when **told**, as in the 'all valid ones' rhetoric, by a

curriculum **to deem** the page 5 segment – {1:all the valid have property x, "**in other words**" 2:all the valid have property x (before the 12th ed.) / "**in other words**" 2:all the ones with property x are valid (in the 12th ed.)} – **a** '**definition**', somehow. Naturally, it is no such thing.

The "**in other words**" part was true until 2013 but could not connect {2} with {3} until the 12th ed. reversed sentence {2}, which made "in other words" untrue, by which the authors evidently attempted to justify the assumption rested on in the next part, {3}, the assumption that the {{1}, "**in other words**" {2}} part **constitutes** a rationally based equivalence-claim they can then lean on and repeat in {3}, one that in turn can be referred to 70 or 72 pages later as a '**definition**' derived at with no violation of logic or reason - a patent error, naturally.

The reasonable reaction, on the other hand, is to say that a 'definition' can not be in the form of an 'affirming the consequent' line of thinking, nor as an 'affirming the consequent' type **account**, whether we call our line of reasoning an argument, an anecdote or an example when we, 70 or 72 pages later, make a reference to the line of thinking that began with the {1}:'**all the valid** ones have {property x}' type sentence, on their page 5. A reference to a premise as the basis for a conclusion constitutes an attempted logically deductive argument, and it is either deductively valid or it is not. This one is not. The evidence for that is objectively

verifiable and will remain undisputed for as long as we deem all ‘affirming the consequent’ lines of though invalid. We have for over 2000 years. Kant affirmed it, not ‘the consequent’ but the fact that concluding by ‘affirming the consequent’ is invalid. So did Wittgenstein. And so did Tidman and Kahane; and lately Hausman, Kahane and Tidman – in a published work so profitable that it runs in generations by adding co-authors who by adding a page become apparent co-heirs to the authorship.

In other words, if we say that the “**fundamental**” of that which constitutes something is by the very expression of ‘that property being fundamental’ also implied to be “all” of what is constituted, then we are in verbal violation of the fundamental meaning of the word “fundamental” itself, inasmuch as ‘fundamental’ is ‘the basis of x’ rather than ‘x’; it is ‘**what begins**’, not ‘what constitutes’; which I suppose is why some languages use the form “*fundament*” for the notion ‘foundation’, to refer to the structure that holds something up. That which is called “the foundation” or “the fundamental” is not by that phrase in itself verbally construed to be ‘the entire thing’.

Referring then, on page 75 or 77, to one’s arrival at some manifested ‘**definition**’ 70 or 72 pages earlier, though the page number (5) is not specified – or, which would be equivalent, referring to a manifested ‘**equivalence**’ between ‘validity’ and ‘property x’ – as if “fundamental” was intended to mean not ‘that

which upholds' but the entire thing, including 'the upheld', is therefore absurd.

When we refer to "the **fundamental** quality" of a concept or phenomenon, whether or not we specifically refer to the "**entire**" or the "**sufficient**" fundamental quality, all that the logic of the expression "fundamental" can refer to is "the **necessary principal**" of the ingredients that go into **the integral** of the criteria of the notion (here 'validity') that rests on the foundation in question; leaving 'that which is **sufficient** to constitute the notion itself ' **unspoken of** and even the 'sufficient to constitute the foundation of ' implicitly incomplete. A "fundamental property" can only be a guarantor for 'the beginning of the sufficient' list of criteria of that which is upheld by what 'the fundamental' refers to.

And we could say, then, something like this: that "there **might be other** factors to add, but in our account we shall use as our **definition** of validity – our **sufficient** criterion-integral – '*property x*' **only**"; or, we might as well talk about 'the **beginning of what constitutes**' validity, and in the continuation of the validity-account treat that sentence, {1} on page 5, as '**the beginning** of what constitutes validity'; a '**partial** sufficiency-criterion' that we then build on by the introduction of the other part of a dual compound criterion, just like Immanuel Kant did.

There is nothing within logic or logical reasoning in itself that dictates or suggests that we treat that property x as 'sufficient', nor

anything within logic, reason or even statistics that benefits from doing that; and basing it on nothing more than a premise 70 or 72 pages ago that says property x is '**required**' is not only nonsensical, it is a **false** superordinate claim that says it is 'sufficient' because it is 'required'. No such logical connection exists between the page 5 initial premise {if validity, then *property x*} and the claim - in {3} and {4} - that 'property x' is sufficient for 'validity'. We may therefore not make the claim that there is such a connection. This is a matter of concern to all students of logic, hence a quite serious matter.

Stating that something is '**fundamental**' is saying it is '**universal**' and 'required' but not necessarily 'sufficient. It is logically equivalent to saying it is '**required** in order to belong in the category', but it simply does not constitute the claim that it is '**sufficient**'. This is basic logic, about as basic as it gets, actually. We are really back on the level of some of the debates that went on more than two thousand years ago in the academies of Greece and what is now Turkey. This will be exemplified below by a dialogue on pharmacology dating back to the 100s, the second century, involving a Medical Doctor, Claudius Galenus (129-199 AD), as a voice of reason with an internalized sense of what is deductively 'valid' - "follows" from the stated - and what is patently not.

Tidman, Kahane and Hausman (1999-2013), on page 75 or 77 (depending on the edition) of *Logic and Philosophy*, tell us to

"**Recall** that a valid argument is **defined** as any argument such that [...]^{x} " – such that it has [property x], and we only have page 5 as a possible referent to "defined". But the act of "**defining**" the notion validity, any notion, is not necessarily complete just because we have stated '**the beginning** of what constitutes' the notion, have cemented "the **fundamental**" in the construction of it. Saying "the fundamental" logical property is so and so does not constitute the act of saying the list of defining characteristics of the notion is complete, and we have therefore not yet expressed a '**definition**', not even if we interpreted the claim to say "the **entire** fundamental logical property of ... is so and so". The reader who now begins to see this is beginning to see it just like Kant saw it and accounted for it, not that long ago.

Until we raise the fence verbally and say "our **definition** shall be ...", we have not 'raised the fence', have not 'defined' anything beyond a '**beginning** element of the 'sufficient' list of criteria of the concept, a 'necessary principal' in the act of raising a fence around the notion, the act of 'defining' it.

So, all we have done verbally by specifying 'the beginning' – oddly enough, even if we were to say "the entire beginning", the "entire fundamental" or "- foundation", of 'validity' – is specify a 'sufficient **necessary beginning** of the act of raising a fence around the notion'; which tells us it is fundamentally confusing to our senses to apply the notion 'fundamental' in the context of 'defining

criteria'. It takes a steady eye, here, to avoid loosing track of one's reference and falling in.

The first trap is this: a '**universal**' property is not stated to be the '**sufficient**' set of properties until it is stated to be either 'sufficient', 'required and sufficient' or a 'definition'; and the second is this: calling it '**sufficient**' is not justified by referring to a prior claim that the property is '**universal**' or '**necessary**', nor, as I have now demonstrated analytically, '**fundamental**'.

It is like saying "the **necessary** beginning" of what we need for the constitution of the concept is so and so, and then refer to that as {a "**definition**" of 'that which it is a necessary beginning of'}, as definition-wise insufficient as that may be, which I say it is. A collective understanding of **the definition** of 'definition' and of the limited validity of mis-phrased attempts to define 'validity' will need to be collectively edited if it is insufficient.

Expressed logically, sentence {1}, therefore, **only** says:

1:{If we have [deductive **validity**], then $[...]^x$ }, where $[...]^x$ is the necessity [If all its premises are true, then its conclusion must be true], in the following only "**property x**", which is to say:

1:{validity implicates property x}, or:

1: {*validity* ⊃ *property x*}, and nothing more

– the simple way of saying:

$$(x)\,[(Ax \cdot Vx) \supset Nx]$$

(*for any given entity x it holds that if it is an Argument and Valid, then it has deductive Necessity, N*)

Verbal Figure 4

The proposition {*validity* ⊃ *property x*}, it is worth noting, does not in itself exclude the possibility of our coming across an argument that in spite of having 'property x' – even if assuming this to only be possible in some semantically concocted sense – still doesn't have the kind of 'validity' that universally "implicates" 'Property x'.

Like it or not, this is a logical fact, independently of what anyone might think. It is in fact logically impossible to be 'thinking' rationally when thinking the opposite. It is a logical cornerstone, and it has been transgressed in the teaching of logic, globally so, for decades.

The next sentence, in the 9th, 10th and 11th editions (1999, 2003, 2007) of *Logic and Philosophy*, says – and it is not a new premise, but specifically claims to be an apposition or interpretation of {1}:

2:{"In other words, *an argument is **valid** just in case it is impossible for all its premises to be true and yet its conclusion be false*."}

(italics as in Tidman, Kahane and Hausman's text)

– where the logical operator "**just in case**" clearly is logically equivalent to "**only if**" (but even if that were not so the move to metadeductively relevant sentence {3} as we shall soon see, is nonetheless invalid), which gives us this to begin with, on page 5 (Verbal Fig. 5 a-c):

1: {deductive validity **implicates property x**.

"In other words",

2: {deductive validity "**just in case**" property x}, which is:

{deductive validity '**only if** ' property x}, which is:

{**If not** property x, then **not** deductive validity}, which is:

{**If** deductive validity, then property x}, which is:

{deductive validity **implicates property x**}

Verbal Figure 5a

The metadeductive rhetoric, from the very beginning of page 5, therefore, says this in the editions published 1999, 2003 and 2007/2010:

{1: deductive **validity** implicates [property x]

"**In other words**"

2: deductive **validity** implicates [property x] }

– which nonetheless is a **falsely implicit basis** for the move from {1} and {2} to:

{ 3: validity is **equivalent** to property x }

(all on page 5, before the 12th edition)

Verbal Figure 5b

– but in 2013 the "**just in case**" – which is to say '**only if** ' – in {2} was subtly adjusted to merely "**if**", which gives us:

{ 1: "**if**" **validity**, <u>then property x</u>

- which is:

1: property x "if" validity

- which is:

1: validity **implicates property x** –

"**In other words**"

2: validity **if property x** }

– where {2} is in fact **not at all** {the same as 1 only "**in other words**"}, but actually is {**the opposite** of 1}. It is

2: **property x implicates** validity

(all on page 5 in the 12th edition)

– which makes the words "**in other words**" false, and the claimed basis for the move to 3 remains illusory.

Verbal Figure 5c

– In 2013 the segment was made into 1:{[validity implicates property x], "in other words"2:[property x implicates validity]}, which is absurd; as if to prepare the basis for the move, still on page 5, in the next paragraph, to metadeductively relevant sentence {3}, which claims logical **equivalence** based on nothing but {1}. The sequence-based implied **cohesion** between the neighboring elements {2} and {3} constitutes the claim that {3} **builds** on the preceding rather than is the **cause** or **foundation** of it, and {2} in turn explicitly claims, but now absurdly so, to be based on {1}, all on page 5 - {1} and {2} within the first five lines, {3} within the next four lines of text, the beginning of a meta-deductive text no one can understand without understanding that it is a patent error.

The move to the next deductively relevant sentence, {3}, which initiates the second paragraph on page 5, is futile, inasmuch as it jumps to the false assumption that what has been said so far in the sentences quoted – lately edited into a move from 1: *a* ***implicates b*** to 2: ***b implicates*** *a* in the 12th edition, still with "**In other words**" between {1} and {2} – could even possibly support the claim of equivalence, any more than in the previous editions, between *a* and *b*, here 'deductive validity' and 'property x' in:

{3}: "To determine whether or not an argument is valid, one must ask whether there are any possible circumstances under which the premises could all be true and yet the conclusion be false. If

not, the argument is valid." (p. 5)

– which pretends as if what has been spoken by

{{1} "**In other words**" {2}}

rationally says:

{3: deductive validity is **equivalent** to property x}

But, naturally, by substituting, in the 12th edition, "**if**" for "**just in case**" in metadeductively relevant sentence {2}, the move from {1} to {2} was made into a false conversion, an absurd move, while nothing was done about the ungrounded arrival at {3} and the unfounded assumption it implies: the assumption that because all valid arguments have the fundamental logical property {x}, we therefore have logical equivalence between validity and that particular property.

The edited detail in the 12th edition creates the appearance of cohesion in the move from {2} to {3} but makes the move from {1} to {2} absurd. The authors evidently became aware that something was wrong and attempted to repair it. But there is no repair that can uphold a conclusion that claims to be grounded in the verification of a consequent. The entire rhetoric is here explicitly grounded in a conditional, and explicitly builds on a verification of its consequent 70 or 72 pages later by referring falsely to the conditional it uses as its grounding, calling their page 5 opening account "***a implicates b, in other words a is equivalent***

to b ” ‘***a “definition” of ‘a’ as ‘b’*** ’. Naturally, it is a patent error.

The proof of it is so basic that it may cause disbelief. No editing can repair the account without repairing the “in other words” claim between {1} and {2} and adding a subjectively intended ‘definition’ that replaces the one they try to deduce from a naturally occurring regularity they verbalize as the universal conditional {*all the valid arguments have property x*}, a universal relation observed to hold between what appears to be two naturally occurring phenomena, ‘deductive validity’ and its “fundamental” logical property. It does not help calling the property “fundamental” – a ‘foundation’ and ‘necessary principal’ – because being a **necessary** basis does not make it a **sufficient** one. This is old knowledge unsuccessfully disputed every time, anywhere in the world. The proof of that is unambiguous, because it is a logical proof, which will be demonstrated below.

The make-believe based claim of equivalence in {3}, on page 5, is repeated on page 8, and the leap to page 75/77 is then treated as a continuation of the same rhetorical sequence, but one that spans a sea of forgetfulness followed by the apparent wished-for ending by changing the perception of **fundamental** past rhetorical moves, moves **rested upon** rhetorically; errors capitalized on when they ought to have been opposed, then corrected either by the same authors acknowledging the facts and attributing their discovery or by competing authors given access to publishing-space.

So, the reader must wait 71 or 73 pages (depending on the edition) before the possible purpose of the logically invalid conversion on page 5 – the conversion of the material conditional 1:{validity implicates property x}, a universal matter-implication – materializes, revealing a marginal but nonetheless present, possibly statistics-inherent, surface-level benefit; the appearances-wise only benefit of allowing contradicting data sequences to carry the label 'valid'. The cost is to the rationale of logic itself: having to pretend 1:{ALL the valid HAVE property x} is not merely 1:{validity implicates property x}, or pretending that it is the same as {property x implicates valid}, and looking students in the eye as you 'teach' it to them and keep the meta-deductive invalidity of its alleged rationale secret.

Page 75 or 77, depending on the edition, completes the argument by pretending, in {4}, that Premise 1:{validity implicates property x}, is a 'definition', a 'fencing in' of the **sufficient** AS WELL AS the **necessary** criterion-integral of 'validity':

4: "Recall that a valid argument is defined as any argument [such that it is not possible for its premises to be true and its conclusion false]^{x}, which amounts to [it not being possible for the premises of the argument and the denial of the conclusion all to be true]^{x}." (p. 75/77)

– which, unpacked, is 4:{**Recall** that validity "is **defined** as" any argument such that [property x], "which amounts to"... [property x] rephrased)}; which is

4: {**Recall** that validity is **equivalent** to property x}

– which can only refer to the page 5 invalid conversion from sentence 1:{deductive validity implicates property x}, not at all a 'definition', inasmuch as a "*p implicates q*" statement, a so-called material conditional, only says that [*q*] is **necessary** in order for [*p*] to be the case. It says nothing about [*q*] being **sufficient** for [*p*] to be the case. That is a fact taught by the universe itself. It is therefore quite absurd, in this case, to say:

4: {"Recall" the definition ...}, i.e. {"Recall": validity ≡ property x}

– based on nothing but the page 5 observation, the starting point, 1: {*all instances of validity ⊃ property x*}.

The effect of beginning the initial metadeductive paragraph, on p. 5, by pointing to an **observed** natural **regularity** similar to "all pneumonia is associated with fever, and building on it lexically and cohesively, does nothing towards forming a basis for the claim that all cases of the naturally observed consequence are associated with the particular antecedent - no more in the {all deductive validity is associated with property x} premise than the [a]{all **pneumonia** is associated with **fever**} logically converts to [b]{all cases of **fever** are

associated with **pneumonia**}. The latter, [b]{}, even if it were true, could not be derived at from the former, [a]{}, not logically. So if the latter is being claimed, [b]{all **fever** is associated with **pneumonia**}, the claim cannot lean on the former as a textually implied premise. If it does, then it constitutes an absurdity when referred to as if it were a validly derived definition. Fever is **not** logically **equivalent** to pneumonia, and in that respect not a 'defining property' of pneumonia, because fever has only been established as a consequent - has not been excluded as a possible occurrence independently of the mentioned antecedent. The same applies to the "**all** valid arguments **have** property x" type statement, whether we like it or not.

It isn't the logically over-estimated role of the implication {validity **implicates** property x} that matters the most here, it's what it leads to: the building up towards a meta-deductive premise, 70 or 72 pages later, by still pretending as if there is nothing wrong with the absurd arrival at 3: {validity is **equivalent** to property x}; telling us to "**recall**" the conditional {if valid, then...} as a "**definition**" they merely repeat in {3}.

The end of it – still on page 75/77 (my bold for emphasis) – is:

5 and 6: "{5:}We can now entertain a powerful and somewhat shocking result. **Suppose** we have an argument that has inconsistent – that is, contradictory – premises. What conclusion

can we draw about the validity of the argument? {6a:}The answer is that all arguments with inconsistent premises are **valid**. {6b:} Obviously, **if** it is **not** possible for even all the premises to be true, it is **not** possible for all the premises to be true and the denial of the conclusion to be true as well."

– which completes the 'Affirming the Consequent' argument, in spite of almost looking like a modus tollens. To the extent that it does resemble modus tollens it is by error. Sentence {6b} is no more than: "{Obviously, **if** the premises cannot all be true, then the counter-example of the argument cannot be true*****}" – which is to say: {Obviously, an argument with contradicting premises will be equally absurd after we reverse its conclusion (and we therefore have a case of **property x,** the Consequent in 1)}.

[* The notion 'the counter-example of the argument being impossible to be true' refers to what amounts to adherence to Kant's "criterion of sufficient grounds", which is the **2nd component** of Kant's dual component criterion of 'logical **truth**' – 'logical truth' being the concept Kant exemplifies by the 'modus tollens' and 'modus ponens' structures, hence being what Kant says is his, and our, "logical **validity**" (see *Didactic-reflexive Form Errors* Part II: Kant's and Wittgenstein's Criterion-Integral of Validity is NOT the presently taught).

The **1st** component criterion, which Kant calls "the criterion of logical possibility", requires the argument (not the counter-example of it) to be 'logically possible as an integral statement', that is "that it not contradict itself". It is, as astonishing as it might sound, simply here omitted by Tidman, Kahane and, lately also, Hausman. The benefit of calling **contradicting** data '**valid** data' is the only possible benefit of it.

It is a benefit that specifically applies to 'the **perception** of statistics', and not even to 'statistics itself ', for which they wrapped logic in a meta-deductive concrete lexical clump of obvious philosophical deceit and sunk it in the depth between the domain-islands of academia; somewhere in the triangle formed by statistics, mathematics and philosophy proper, would be my estimate.

It is a scheme we simply can address by saying no, without having to call ourselves by the name of a specific 'branch' of logic. This is 'logic' as fundamental as it gets, while the '**valid absurd** structures' ideology is what I would call a '**statistics-rhetorical thesis**', one I have now proven wrong. It 'is' not logic but 'uses' logic, among other things. It hardly deserves to be treated as the 'maker' of meta-logic in higher education.]

To sum it up, the unpacking of the metadeductive argument renders the mere:

Observation (the starting point, p. 5):

1: {deductive validity implicates property x}, or

1: {deductive **validity** ⊃ property x} (**implication**)

– **from which** the move (by saying "in other words" or by any other means using it **as a basis referred to** at a later stage **as a ground** for the later stage assumption or claim; whether on the same page or pretending, 72 pages later, that a logically proper ground was formed on page 5) **to**

2: {property x ⊃ **validity**} (**reverse** implication), the next sentence on p.5 in the 12th edition,

and **further on to -**

3: {validity ≡ property x}' (**equivalence**), (all the editions) - **or the straight jump** to it in the rest of the editions*;

NOTE [* All the editions move invalidly to it on page 5, i.e. they move to it by claiming falsely that the move is a logically necessitated exclusion of the opposite claim, which would be a logical removal of all solutions outside the **fence** they refer to with their reference to some 'definition' they say they established; explicitly building on a logical arrival at a '**definition**': in this case claiming they have 'defined', fenced off, 'validity' by saying 'all cases of it' coincide with 'property x'. It is a most basic error of thinking, one that says ONLY the ones with 'property x' are 'valid'

and basing it on sentence {1}, which only says {deductive **validity** ⊃ property x}, which means it does NOT say that ONLY the 'valid' have that property x; and THIS is the trap that caught teachers and authors of logic, and kept all their students' minds hostage, worldwide, and still do.

It is why no one understands why the absurdly concluding arguments NOT AT ALL have to be called 'valid' and why saying otherwise is as absurd as saying "all Chinese drink green tea, so if you spot a drinker of green tea, he's from China". The concluded necessity or likelihood is ludicrous even if you prove that all Chinese in fact do drink green tea; just as ludicrous as the conclusion 'he does not drink green tea' based on the information that 'he is not Chinese'.

Both errors – the sampling of a symptom, 'affirming the consequent', and the elimination of a cause of a symptom, 'denying the antecedent' – are expressions of the **same root error**: the false assumption that "x implicates y" says "**only the x** can implicate the y".

That root error is what I call "the **unassumable** assumption". The failed thought can inflict anyone, but more easily anyone who never had to read about logic and never did, or was misled by confused teachers and authors and found it all too confusing to engage with]

with the **subsequent move to**

4: {"**Recall**....(**equivalence**)"}, on page 75/ 77,

is **invalid conversion of** {1: '**implication**}, a sudden switch to the expression, in sentence {3}, of '**equivalence**'}, without adding any premises to base the claimed equivalence on but claiming a rational basis (with the words "in other words").

It is therefore a false reference to equivalence we see in {4: "**recall**"}, as in 'recall what we said' (actually "recall our definition", when what was actually said, in {1}, as demonstrated, wasn't even close to a 'definition', a 'fencing off'); followed by:

Assumption (an assumed case p.75/77):

5: {"**Suppose**" an argument with property x, what then ?}

(where the natural language segment is **a quasi-instance** of **property x**; but be that as it may, let us just grant Tidman, Kahane and Hausman their 'assumed case of property x'. What then?)

Then this:

Asserted **conclusion** (p.75/77):

6: "The answer is that **all** arguments with inconsistent premises are **valid**."

The structure is:

v ⊃ *property x*	p. 5	{1}:{an **observed** regularity}
property x	p. 75/77	{5}:{an assumed case: "**suppose**"}
/.. *v*	p.75/77	{6}: {"the **answer**"}*

Verbal Figure 6a

* "a somewhat shocking result", say the authors of *Logic and Philosophy, a Modern Introduction* [7]

We may disregard the absurd order, on p. 75/77, to "recall" the equivalence they invalidly convert to on page 5. Premise 1 is the page 5 {*v* ⊃ *property x*}; Premise 2 is the page 75/77 assumed case of {*an argument with property x*}; and the asserted conclusion is {*v*} – the claim that the assumed argument is {*valid*} and that all other absurd cases are valid too.

The unpacked argument is:

{All the **valid** have [property x]}*	p. 5
{All **self-contradicting** ones have [property x]}	p.75/77
{The conclusion: self-contradicting arguments are valid}	p.75/77

Verbal Figure 6b

* - where "valid" is short for "deductively valid"

– which is a case of the invalid argument form called Affirming the Consequent. An ancient example of it is:

"Everything **astringent** is [rough],"

"Everything **olive-oil** is [rough],"

"Conclusion: olive oil is astringent."

Verbal Figure 7

– pharmacologists of the 2nd century, analyzed by Claudius Galenus (129-199 AD) the Medical Doctor, who, according to Jonathan Barnes,[8] quoted the first two lines of it and then added:

" " – and from agreement on them nothing follows." "

(translated and re-quoted/quoted by Jonathan Barnes, in his lectures in Oxford, 2003-2004; cf. *Truth, etc., Six Lectures on Ancient Logic*, 2007[8])

The reason why "nothing follows" from the two premises put forth by the 2nd century pharmacologists is the structure we get. The premises put forth by the 21st century statistics rhetoricians give us the same structure:

v ⊃ *property x* (the observed regularity, p.5)

property x (an assumed case of property x, p.75/77)

/.. *v* (the "answer" by Tidman/Kahane/Hausman, on p.75/77)

It is of course the old

p ⊃ *q*

q

p

– as invalid in 'logic about logic' as it is in logic.

---

[7] [(3)] Tidman, Kahane and, from the 10th ed., also Hausman, 1999-2013, pp. 5 & 75/77 (9th -12th ed.)

[8]Oxford: Clarendon Press / New York: Oxford University Press.

VI. Epilogue

The stability of acquired errors is pervasive in our age. The above analyzed didactic-reflexive form errors are problems that seem to require some sort of intervention, inasmuch as their stability appears to be due to the social need for a universally coordinated instantly occurring universal rule-change, analogous to everyone suddenly beginning to drive on the opposite side of the road. Nonetheless, an objective truth-oriented world of science will have to address not only the mentioned meta-deductive absurdities, but these as well: the formwise absurd self-modification-imperative version of Jean Piaget, hence of Kant; the ethical-/legal-logical absurdity of peer-assessment-based exclusion from autonomous teams during mandatory team-work; and the case of metacognitively 'denying the antecedent' in support of the social-support-imperative we see being implied didactically and methodologically in the learning-sciences world-wide.

Logic as the 'court-of-law' (Gerechtshof), with its unchangeable laws (unwandelbaren Gesetzen) (Kant 1781 – AXI) that regulate verbal discourse, has been marginalized universally in the university world, and not without reason. A new trend that is not what it seems has been allowed to rule in its place, even in grounds manageable only by 'logic', grounds that therefore have not been managed, evidently not lately, except managed 'socially', by peers

in flock.

Whereas Kant's period had superstition interfering in matters of logic, 'modern logicians' after Wittgenstein have removed from the science of logic a piece that did not stand in the way of the newly emerging science of statistics but obstructed the perceived elegance of statistics, an elegance that still belongs to logic alone and which the science of statistics can only feign, and badly so.

Wittgenstein's critical distinction between 'truth' and 'truth-possibility' kept matters in their proper spheres, but then man construed a model of logical '**validity**' that robbed the concept of one of its two constituent parts, and they argued for an opinion of 'validity' by the use of an **invalid** argument form they know is invalid and say is invalid fifteen pages after they use it meta-deductively. They even made an ad hoc validity test procedure that renders as 'valid' all arguments that fail to meet the requirement of the element they removed from Kant's and Wittgenstein's validity-concept.

Finally, to hold the theory seemingly together, the label "**sound**" was invented and stuck partly on the part removed from the dual-component '**validity**' concept of Kant's and Wittgenstein's reality (now implicitly defined as '**soundness-potential**'). Confused? It is only to be expected. But it didn't have to be that way, and still doesn't. The ongoing errors of reasoning in all parts of modern society are associated with a set of circumstances that involve a

very essential failure in meta-logic, at a cost to the real material world of matters and arguments about matters everywhere in society. This error is too serious to be left in the hands of the operators of the sphere that decided to live with the problem at a cost payable by everyone else – who indeed are paying for it, whether they are aware of it or not.