

## THE KANT-PIAGET-CONNECTION

nobody wants to talk about

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It is not a hypothesis, but rather common knowledge, inasmuch as it is known by biographers, that Jean Piaget studied the works of Immanuel Kant carefully; among which *Critique of pure reason* (1781) is the work that offers the theoretical model of human awareness which Piaget later became famous for having presented, published in 1967. Not only was Piaget influenced by Kant; he copied **Kant's model** and gave biological names to its elements, where Kant used entire **verb-phrases** to 'mention' or 'call out' the same elements.

Immanuel Kant's "two **ground fountains** [*Grundquellen*] of human awareness" (*Erkenntnis - knowing*, awareness of the existence and character of things) are: "**adding** the object of our observation **to** the concepts" and "**bringing** one's observations **under** concepts"\* (1781:50-51) - 'adding to' and 'bringing under', 1: 'adding objects to' and at the same time 2: 'making the same objects subordinate to' the same set of presently existing concepts. Kant says they are **inseparable**, the two ground fountains or springs of awareness, and this is how he says it: if either one of them were not there, one would either have empty thoughts or blind observation (1781:51). That is to say the two are always simultaneously operating on each single object and in each single moment of human awareness.

What this says is that there can be no perceived phenomenon with only one of them actively operating, and all examples of **single-spring-awareness** (Kant) and - if Piaget agreed to 'constant and necessary' being essential traits of the two functional sources of awareness, which he did (1967:201, 1971:172) - all examples of **single-subfunction-awareness** (Piaget), will be absurd home-spun pseudoscience, in the worst case scenario a political tool in the hands of abusers who use science as their social instrument, possibly in patent violation of national policy.

(\* "*seine Begriffe...ihnen den Gegenstand in der Anschauung **beizufügen***" and "*seine Anschauungen ... sie **unter** Begriffe zu **bringen***" - 1781:51)

Kant's inseparable ground sources "adding to" and "bringing under" are thus Piaget's inseparable "subfunctions", respectively 1:"**accommodate**" ('grant access') and 2: "**assimilate**" ('**make similar to**'; that is **make** the sense-wise perceived - what is perceived through the senses - (view it as) **similar to**, or as equal as possible to, what we already have conceptual representations (concepts) for.

Kant's "adding to" is thus Piaget's 'allow to enter' ("**accommodate**"); and Kant's "bringing under concepts" is Piaget's 'make (see as) **similar to what is already in the existing schemas**' ("**assimilate**") - cf. Sørfjord/Soerfjord 2015 (the article's 5<sup>th</sup> page, left column):

<http://infonomics-society.ie/wp-content/uploads/ijcdse/published-papers/volume-6-2015/Unlawful-Norwegian-Methods-in-Teacher-Training.pdf>

We can, of course, only assimilate what we are already accommodating, and vv., because 'we can only see (**something**) as similar (to what we already have

schemas to represent) if we are indeed already 'granting it access' (already accommodating that very **'something'**). And whatever we do 'allow access', we only allow access through seeing it as similar to something previous. This is the connection that classes in pedagogy say nothing about. The pedagogy teachers do not know of it and do not want to know; and philosophy teachers (as I have confirmed in Norway, previously in UiA and recently in UiO) obviously do not get involved in the business of pedagogy teachers if they can avoid it.

The domain of 'pedagogy' and the 'learning sciences' world-wide has been allowed to make Piaget's two "subfunctions", which, according to Piaget, cannot be separate phenomena, into precisely that: separate phenomena that they then proceed to exemplify. The examples are all absurd, and all for the same reason, but they fit in with the false paraphrasing of Piaget's description of what "**accommodate**" is: **'realizing one's error and correcting it'**, according to **all** available **books** on pedagogy **in the whole world** that were written in English, and all ever written in Norwegian; and according to all **power-point-slides** on this in all **lectures in all classrooms and lecturing-halls, in all institutions of 'higher' education** within Europe and beyond.

All of them - all the books, all the ppt-slides and all lecturers who preach '**Piaget's accommodation**' defined as **'modification** of existing knowledge/schemas', or as **'faultfinding** within oneself' and **'fault-correction'**, or as 're-establishing the balance one had before a cognitive conflict' or such - naturally, are all mistaken. The act of pointing at 'an instance of a modified schema' and call it "an accommodation", as Piaget did, is quite different from saying that 'all accommodation' is 'modification of existing knowledge or schemas'.

Piaget specifically points out that the organic "**cycle**" (process cycle) "which we at a later stage shall call **schema**", "either continues as before" after 'accommodating' a new element, "or modifies itself". He says he, in considerations on the level of the organ or regarding outer objects", hence in all cognitive contexts, "prefers to use the word **schema**" (1967:200, 207/1971:171, 177); and he unambiguously explains that assimilation and accommodation are both "**constant**", that they are phenomenon-wise "**inseparable**"; he explains how "it is only by abstraction we can even speak of one without the other", and how they are "**not separate functions**" but "opposite functional poles" and "**subfunctions**", meaning tendencies below the level of observable 'function', purely analytical units that cannot occur as phenomena one by one (1967: 201-215/ 1971: 172-185). (This proof, in the form of the original quotes, was offered in my doctoral thesis and thesis disputational defence at the University of Hong Kong in 2013).

### The quote-error - teaching-method connection

The fact that teachers of pedagogy so persistently claim that Piaget defined '**accommodation**' as '**modification** of existing knowledge', or 'fault-correction' and such, is connected to the same teachers' preferred form of "**Socratic** dialogue"; or, more precisely, their pseudo-Socratic dialogue, in which the teacher of pedagogy evaluates how hard it is to make the teacher candidate 'realize how wrong he or she is' and adjust to authority or to one's own peer group', which again is a **criterion** for **getting a passing** grade when the teacher of pedagogy evaluates the '**personality** of the candidate' during his or her practical training, and labels that

activity “**an overall assessment**”, which is a patently unlawful method of evaluating teacher-candidates, but standard totalitarian practice in Norway.

The thing about ‘accommodation’ allegedly being nonexistent whenever the child misconceives something is a formidable error of logical conclusion, a pedagogical smoke-screening of a very simple, even banal, cognitive model. Consensus has in fact in part mixed up the essence of ‘accommodation’ and the essence of ‘**adaptation**’ - where the latter consists of the two abstract subfunctions ‘accommodation’ and ‘assimilation’; so that ‘**adaptation**’ (which is ‘adjustment’), according to Piaget (and Kant), is to ‘make whatever one **grants access similar to** the things that are already represented as concepts’, make whatever one **allows to enter similar to** what entered previously, the model itself making it absurd to think of a single moment with only one of the two parts operating (1967:9-50 and 200-215 in French/translated to English 1971:1-37 and 171-185) - in a model I then trace directly back to Immanuel Kant (1781:50-52).

Piaget himself commented: “The hypothesis which we propose is at the same time very **simple** and completely **banal**” (“...a complete banality”) (1967:37 / translated 1971:26). It is such a simple model that it is actually correct by logical necessity, just like Kant’s formulation of the same banal essence (1781:50-51). They are two verbal versions of the same banal basic thought. And it is precisely the **banal simplicity** of the model that gives it the scientific elegance needed for it to last, and which makes it into the cornerstone that it is - in all modern learning theory and research.

The internal opposition within **the model** is simply this: ‘assimilation’ being ‘**to form the impressions so that they appear similar to earlier impressions**’, while ‘accommodation’ is ‘**to not form them at all but merely letting them enter as they are**’; and the result is always a ‘**building onto**’ but not always a ‘**fault-finding**’ or the euphemism ‘**identification of what one may improve**’, the way ignorant tyrants within pedagogical studies want to have it; decidedly tyrannical and equally ignorant, in the case of Norway.

It is the {‘**building onto**’ **without** necessarily having to ‘**tear down** something’ or ‘**modify** something’ or ‘**identify** something that **may be improved**’ **at all**} Piaget is talking about in the whole book, which the mentioned tyrants have not read at all and do not care reading at all when I point at their fraudulent quote.

The mathematician and physicist Immanuel Kant saw the same as the biologist Jean Piaget; and he saw it 186 years before Piaget, who, naturally, saw it with the help of the former. Kant said the human mind “**constructs**” the objects of the mind’s **sensewise** perception within the **roomwise** quality of reality, and this is then the basis of Piaget’s “**structuralism**”. Kant, furthermore, saw the possibility of the ‘group’ abusing its power over the individual, and he saw the need for the pedagogue to interfere immediately and with a firm hand, interfere both with physical strength and firm intent (1803: *On Pedagogy* §95). But Kant does not seem to have seen the problem of the medieval prayerhouse style version of the Socratic pedagogical dialogue: the command to ‘**find your fault and repent**’ – the abuse of power that lies in the pedagogue’s (and, naturally, in the metapedagogue’s) **pseudo-Socratic demolition dialogue** - the ‘**tearing-down-talk**’ style pedagogy. Piaget saw it.\*

\* One who also saw it was Basil Bernstein (1924-2000). There is a bit of the falsified Piaget and a bit of the misunderstood Vygotsky in the true story Basil Bernstein told of teachers who inspect the children’s drawings and let praise be followed by comments on

what's missing in the drawings, comments like "**But where is the chimney?**" aso (Basil Bernstein 1990, ch.2 / 1996, ch.3), which paints this in a bit of a darkly humoristic shade.

The '**tear-down-talk**' style dialogue is of course as old as the phenomenon 'instruction'. The real 'Socratic' dialogue, namely the type that *Sokrates*, according to *Platon*, himself engaged in, incidentally, is not at all of the 'designed self-falsification' type but a '**designed self-discovery**' type leading towards the point where the pupil '**gives birth to** his or her own knowledge' and the pupil realizes that the knowledge proceeded **from within** - and this, naturally, holds for meta-pedagogical dialogues as well, in teacher education.

**Structuralism** (the idea of the mind's internally structured building process) implies that 'self-falsification' as a dialogic element is destructive. Both structuralism and **con-structivism** (the idea that we do in fact build 'the idea of reality', or 'reality' as 'an idea', together) dictate it is in fact the opposite that one ought to elevate and advocate: '**compounding**'. And **structuralism** is precisely about the discovery of the human mind's natural and **constantly ongoing idea-wise compounding**, or '**building onto**', the '**building on top of and around what is already there without having to tear down any of it**'. It is '**continuous compounding**' - continuously building **on the good** parts, **without** necessarily having to tear down any-thing at all (Piaget 1967:13, 200-201 / 1971:4, 171. That is what Piaget's '**structuralism**' is; itself based on **Kant's 'structured cognition'** - cf Kant 1781/ 87).

In '**social learning**' this would imply the **putting together** of what each and every individual member has to contribute, all of the contributions; 'putting them all together', rather than 'voting on' what to include or exclude and inevitably voting on who to include or exclude. This is how we **unpack postmodernity's idea** of '**cooperation**', the '**group work**'/'**team-work**' paradigm we get from 'unregulated group-mediated regulation of the self' - the oxymoron '**unregulated group-regulation** of self-regulated learning' - and expose it as the **giant postmodern hoax** it is. It is in fact the mere opposite of 'cooperation', built on the opposite of what both Piaget and Vygotsky taught us.

The two 'subfunctions'.

Our 1:'letting the impressions enter' and our 2:'making them similar to our present schemas' are "necessary", "constant" and "inseparable" "**correspondent premise-criteria**" (*conditions*) of the "cognitive adaptation" process, says Jean Piaget (1967:201-202 / 1971:172-173). It is **only** when our 1:'adding the objects of our observation to' and our 2:'making the objects surrender to our present concepts/categories' "**come together**" that 'awareness' springs forth, says Immanuel Kant (1781:51). Kant also says part of our cognitive structure is **prior** to all experience, inherited structure of the mind, '**pure**' reason. And therein lies the idea of the mind shaping the objects of its observaton according to the existing structure of the mind itself. It is an **active** and **constantly ongoing** process of awareness-production, as opposed to the idea of the knowledge of things (Kant) - awareness of the things' character (Piaget) - merely entering the mind by the inherent cognition-dictating force of the observed\* objects themselves.

\* Kant is talking about '**observation**' (Anschauung) as 'observation with **all senses**'.

Kant's thinking was **the reverse** of the common pattern of thought about this, much like Copernicus' way of thinking when he 'moved' the centre of the universe out of the earth. **Piaget** carried forward Kant's purely functional description of the awareness of the qualities of the things we observe, where Kant merely authors a way to functionally describe the obvious. Virtually regardless of what science finds out about the mind's awareness of the characters of the things we observe, his two 'ground springs of awareness' are merely functional **categories** or tendencies and can still be viewed as consistent with the details we later put into the categories as science progresses. The thing about the two tendencies constantly, in every single moment, neutralizing one another is a way we may put it almost regardless of what the neuro-data-biological process itself consists of. We can say it is 'structured' and that will be meaningful to us. The mere capacity is the basic cognitive structure that is there long before birth, prior-wise ('a priori') **awareness and reason**, the part of it that is 'purely' awareness and reason, 'pure' (*rein*). There is no mystics about Kant. He is as simple to grasp as Piaget, but postmodernists and so-called 'translators' have destroyed that simplicity for higher education, made him seem the opposite.

In Norway it is mainly UiO's "Institute for philosophy, idea- and art-history and classical languages" - IFIAC being about as short as we can make that in English but "IFIKK" being the Norwegian acronym, organized as a part of the faculty of humanities. The mere length of that exhausting acronym is enough to make us understand that the philosophy - **the love-affair with knowledge** - is squashed by the surrounding mass of heavy special interests, drowning in its noise and becoming voiceless at that university. Similar **deaths to philosophy** have happened in other universities. Only mysticism and the **statisticians** and **statistics-rhetoricians** (the latter dare to call themselves **logicians**; cf. *Didactic-reflexive form-errors*, Soerfjord 2015) **of relativism echo** universally, **clam up** or **roar** when opposed; **threaten** when losing a debate.

It is not the 'things' themselves but rather what 'shines off' from the 'things' that meets the sensitivity of the mind, its senses; which leaves the essence of things, or 'the thing itself', unknown to us. But, notwithstanding Kant's allusion to Copernicus in his foreword to the 2<sup>nd</sup> edition of the book, in 1787 (p. XIII, XVI), in no manner does he imply that '**opinion**' defines '**reality**'; quite the contrary, and quite explicitly so from the very beginning in the 1<sup>st</sup> edition of it, in the 'foreword' (the 'A-edition' p. XV):

"Now, as far as **certainty** goes, I have uttered before myself the judgment that in this type of consideration it cannot in any way be allowed to **opine**, and anything that even looks as if it has a **hypothesis** in it shall be forbidden goods that neither shall be offered at reduced price, but must be confiscated as soon as it is discovered." (p. XV, rephrased p. XVII)

And we see it implicitly in the foreword of the 2<sup>nd</sup> edition, where he advocates **objectivity**:

"And this is how the advantageous revolution of the way of thinking in **physics** came about thanks to the idea that one, according to what reason places in nature (**not imagines** into it), must **seek in nature** what **reason must learn** and which reason would not know anything about on its own." - where the parenthesis is Kant's parenthesis (1787:XIII-XVI).

“Unconditional plasticity [**formability**] of cognitive structures under the influence of the environment”, Piaget says, is “accommodation without assimilation”, ‘pure **accommodation**’, and is impossible as a ‘selfregulated process’ (1967:203 / translated to English 1971:174). He goes on explaining how the structures’ ‘selfregulation through unconditional **firmness of form**’, ‘pure **assimilation** into completely firm structures’, is equally impossible. But this isn’t what proves the ‘single-subfunction-phenomenon’-examples so absurdly wrong; it is the continuation that does, where he stresses the same as Kant did: the continuous presence of both, in all phenomena that reach the human mind, as the very engine of awareness itself. **Take away one of them for a moment and one is unconscious for the duration of the moment, by definition.**

Piaget says the solution therefore lies in “a third possibility”: We adapt by way of **two “abstract” - that is ‘not-on-the-phenomenon-level’ - functional components** he says biology already calls ‘assimilation’ and ‘accommodation’, **the two constantly pushing against each other** in an **accutaly variable** opposition of forces that continuously **maintain, redefine and re-establish** “equilibrium”, ‘the point where they cancel each other out’ (1967: 204 / 1971:174). It is a relation we may easily model visually as a closed cylinder filled with two different gases separated by a flexible wall or a piston - a mutual relation of constantly re-neutralizing abstract fuctional ‘pressures’; a **dynamic stabilization** process where variation in one ‘pressure’ moves the flexible wall or piston until it finds its new point of balance; or, more precisely, its ‘point of mutual **cancelling out** of the two functional forces’ (both the physicist Kant and the biologist Piaget, naturally, had thorough knowledge of this principle, a common principle in mechanics and biology).

This is the **internal dynamics** that Piaget says is the driving force behind ‘the adaptation-**process**’ (always in singular), where accommodation is “inseparable from assimilation”. Piaget says this about the way the species adapt their internal biochemical sequences (“cycles”) under the influence of changes in the environment; an adaptation that he suggests has a partial similarity with cognitive “schema” - with my brackets [...] inserted:

“The **constant functional correlatives** [*conditions*] of the process [one single process only] are two in number - **assimilation** and **accommodation** - and their tight unity [“solidarity”] shall now be determined”...“But if the new element does not destroy the [organic process] cycle [, whose correlative is the cognitive “schema”], it may happen that it modifies the cycle [“it”].” ...“**If the assimilation of a new element ... did not cause modification ... it would only mean that modification happened to a sufficient degree in association with previous accommodations into the cycle, but the assimilating\* cycle would nonetheless have gone through accommodation.**” (1967:201 / 1971:172) ... “Secondly, we must stress how inseparable they are, assimilation and accommodation, the constitutive **conditions of adaptation – immediately necessary and inseparable.** ... To sum it up: assimilation and accommodation are **not separate** functions; but the two functional poles, in opposition to one another, of any **adaptation**. So it is only by **abstraction** that one can even speak, which we have done and shall do again, of assimilation by itself as something that makes up a critically important function ...” (1967:202-203 / 1971:173).

\* assimilating cycle in all the occurrences of the French *cycle d'assimilation*, not assimilation- and assimilatory cycle, as in the 1971 translation by Beatrix Walsh

Hence, to **adapt** means to assimilate impressions into structures that “**either continue as they were or modify themselves**\* **after** the **accommodation** of a new element”, (1967:200; cf. p. 203-204 / 1971:171; cf. p. 174); and these two - shall we call them ‘pressure’?: accommodation and assimilation - **constantly push in opposite directions**, continuously re-establishing the point of balance between the two “**constant**” and functionally opposite “**correspondent premises-criteria**” (*conditions*) of adaptation, the two “separable only by **abstraction**” extreme ends of the register of their point of balance, the “opposite poles” **which ALL cognitive activity continuously fall between**.

\* and this has nothing to do with ‘**cognitive crisis**’

This article also serves to illustrate the fact that Kant’s *Critique of pure reason* (1781) in its entirety, in addition to the brief segment pp.50-51 (1781)/pp.74-75 (1787), speaks the very cognitive model that Jean Piaget made known to a wider audience in his book *Biology and Knowledge: Essay on the relations between organic regulation and cognitive processes*, in 1967; a model that this wider audience then went to work on with a pick axe before they glued some of its broken pieces together into a political poster and made it into the slogan- and ppt-banners that have indoctrinated the world’s teacher candidates ever since.

Not only is there no need for ‘**cognitive crisis**’ in order to have efficient learning; it is counter-productive to consciously design teaching so that it may induce cognitive crisis, partly because it causes teachers to ‘**go fishing**’ for ‘the **necessary present confusion**’, looking for students to **impersonate the holder** of that ‘**necessary present confusion**’, or worse: interpret students dialogically with a bias towards that ‘**necessary present confusion**’.

That whole fishing-expedition type of pedagogy is contrary to the imperative to interpret according to the ‘**principle of charity**’. The ‘**fishing for a necessary present confusion**’ is a pedagogical charade I have witnessed too many times for too long to not speak up about it. It is patently detrimental to efficient learning, patently contrary to both Piaget and Kant. This is the idea of ‘**cognitive crisis**’ as the strongest ‘**modification-motivator**’. It is **religious in its origin**, produced by men of the Dark Ages, carried forward through the medieval period.

It is the pedagogic doctrine of the **pre-renaissance men of the church**. That is how ridiculous that fad is. It isn’t Piaget’s recommendation at all. It is a ‘**confess-and-repent**’-commandment. It is clearly suppressive; abuse of human beings, and based on a lie. And it isn’t very intelligent at all as learning-environment-design.

We need ‘**intelligent design**’, if I may steal a phrase popularistically applied about the idea of a cosmologically manipulated evolution unto the present world - we need **intelligent design** of **learning environments**. To get that, we must strike down on the abusers of social power in the institutions of teacher education, and strike hard. Rock the boat, is what we need to do, rock it so hard that the water pours in through the gaping holes in its side and sinks it. That is when a new boat can be formed, one with:

another structure altogether.

It is all those among **pedagogues who say** we must 'become aware of our errors and modify ourselves in order to learn' - 'confess and repent' - who **themselves** must confess, turn around and modify themselves; that is, all those who today 'believe' in 'accommodation' as "*error-correction, according to Piaget*".

But we **must force them** to,  
especially the pedagogues who teach future pedagogues.

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