

## 4. 5. *Deductive and reductive thinking*

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### **4. 5. 1 Fates (deduction)**

Bibl. st.: R. Godel, *Une Grèce secrète*, Paris, 1960, 236/239 (Le destin); H. Kelsen, *Die Entstehung des Kausalgesetzes aus dem Vergeltungsprinzip*, in: *Erkenntnis* 8 (1939); W.B. Kristensen et al, *Antique and modern cosmology*, Arnhem, 1941. We pause briefly to consider a mythological destiny which we represent, in descriptive logic.

The ancients, Egyptians and Greeks, for example, set a general cosmic law ("anankè") for fate and the destinies of life. Everything that exists, as soon as it begins to exist, is given a destiny in the form of a portion ("moira") of life force or capacity for happiness that limits the measure of its prosperity. This portion or share in the cosmic well-being exhibits a cybernetic (steering) structure: "If a goal-directed course (within the general framework of cosmic law) is given and deviation from it occurs, then it follows with necessity ('anankè') - possibly assisted by e.g. deities - restoration of the violated cosmic order or law". Note: This steering structure can be found with e.g. Plato and Aristotle. The latter (in *Politica* v: 5) says that, among other things, deviant constitutions ('parekbasis') provoke feedback ('epanorthosis' or 'rhuthmosis'), i.e. restoration.

Godel specifies. Deviations - border crossings (which compromise the portion of pleasures) - show themselves in related symptomatic behavior: disrespecting one's parents, overwhelming a defenseless person (orphan, old person, woman, begging, pleading) e.g.. One who commits such a thing shows that his soul suffers from shameful behavior ("aischos") which then itself points to self-aggrandizement ("koros"). This, in turn, may indicate a force of mischief ('kakodaimon') or even an evil, mischief-making spirit ('alastor').

***Tempting situations.*** Godel. If a mortal acquires excess concerning happiness ("olbos"), e.g., wealth, then the temptation is near to fall into boundary crossing ("hubris"), psychologically out of "complacency. If a mortal knows "nothing but misfortune," then the temptation occurs to him to rebel against the general cosmic law as a rebel. In both cases, this crossing of boundaries (always the moira or portion of life force!) provokes restoration of order ("erinus"). The latter, however, is often given to envy ('ftonos') of the deities which thereby actually and on close examination, show only h ar subjection to the 'anank e,' the necessity, present in the cosmic law.

The concrete extent of the cosmic law. Material realities, celestial bodies, deities, human beings, animals, plants, i.e. the whole cosmos or nature ("fusic"), are subject to that law in the form of a moira, a share of happiness.

***Note:*** One sees that all those who believe in such a cosmic law presuppose it as an unshakeable axiom, from which, in the course of life and history, derivations are deduced as so many "explanations" of what fate shows. One can reject this of course as "mythical thinking" but something is certain: many non - Christian people in the course of history had to this a kind of axiom of justice, namely, "Evil is lawfully however mysteriously punished." Thus, logically addressing a mindset can greatly clarify it and make it understandable: mentalities posit axioms as "reasons" and deduce "inferences" from them!

#### ***4.5.2 Historical logic***

As an axiom, everything that is has a reason. Is this axiom also applicable to the order of what are called "historical facts"? In other words, are historical facts rationally intelligible? Let us consider this with J. P. Vernant, *Mythe et pens ee chez les grecs*, II, Paris, 1971,55.

***1. The common sense.*** "It had to come." Thus the common sense expresses the deductive relationship between facts - as preliminaries (reasons) - and other facts - as sequels (inferences).

Model. One day a strike breaks out in a factory. For outsiders a complete surprise! For insiders, "It had to come."

***Applied logic.***

- a. The pattern has proved inflexible for months.
- b. The syndicates did not give an inch. Tension rose: "It was cutting." Logical: what to outsiders from the information at their disposal was not 'deducible' was, for the insiders, "the logical conclusion of the whole situation." This is how they expressed it.

**2. *Historiography by Thucydides of Athens*** (-465/-401). Vernant talks about the work of the ancient-Greek historian Thucydides (Peloponnesian War). He cites M.I. Meyerson to: "The order of facts with Thucydides is logical ( ... ). The time with him is not chronological: that time is practically a logical time". Vernant also quotes J. de Romilly on this point: "Thucydides' story - e.g. of a battle - is a theory".

**Note:** J. de Romilly obviously means "applied logic" because Thucydides depicts a victory won as confirmed reasoning in the sense of "If one knows the circumstances, then the victory is deducible as a kind of historical necessity." Or if the omens (as reasons), then the sequels (as inferences) are deducible. Thus both common sense and "historical reason" make facts rationally transparent.

**Note:** If there is a thinker who makes such historical reason central, it is Hegel: in all facts (phenomena in which the idea or mind takes form) "reason" ("Vernunft") is at work. This is called "Hegel's logicism." Something that should not be confused with mere abstract thinking, detached from what happens. No: what happens is logical! If only one can gather enough information about it, which of course is very often impossible. Hence the superficial impression that "everything that happens is so opaque". Existentially speaking: because we do not know the reasons due to lack of information, what happens comes across as 'meaningless'. Meaningless," i.e., although we are involved, our involvement in it comes across as if it "touches no ground. We resemble a blind person learning to box.

#### **4. 5. 3 Hegel's deduction as data understanding**

Introduction. To correctly grasp Hegel's concept of deduction, the following. Bibl.st.: B. Bourgeois, Hegel, in: J.-P. Zarader, coörd., *Le vocabulaire des philosophes, III (Philosophie moderne (XIXe siècle))* Paris 2002, 4/176 (Concept (Begriff)).

All that ever existed, now exists, ever will exist, is called G.F.W. Hegel "The Living Whole."

The constituents - 'elements' - he calls 'moments' (understand: mobile evolving elements) constituents in development. In this sense, Hegel is a 'mobilist' (movement thinker ).

That living whole (the 'system' of reality) with its moments is at its core "The Understanding." The history of the universe shows us that "understanding," which unfolds into the living whole. In this sense, Hegel is a logical thinker through and through.

To "grasp" or rather "understand" ("begreifen") reality is to establish that understanding which unfolds and thus shows itself as immeasurable. Hegel is - for his rationalist contemporaries at least - incredibly fond of experiencing what shows itself. In this sense, he is an experiential thinker.

**Deducing.** Bibl. st.: H. Ett, edit., E. van den Bergh van Eysingha, *Hegel*, The Hague, s.d., 67w. Herr Krug accuses Hegel as if he, starting from abstract - a-priori 'principles,' all that existed, now exists and ever will exist, 'deduces' in such a way that the actual existence of the things that collectively make up the universe is necessary. He therefore challenges Hegel to 'deduce' in that a-priori way e.g. the existence of cats and dogs or of his penholder .

Hegel's response. In 1802 Hegel publishes a text: How the ordinary human mind conceives philosophy, made clear from the works of Herr Krug.

**1. The proof of existence.** To "prove" the existence of e.g. dogs, cats, a pen holder is meaningless because for Hegel that existence is a given! This shows Hegel as a thinker of experience.

**2. The raison d'être.** Hegel's answer decays into two steps.

**a.** The subjectivist-rationalist philosophy understands Hegel's "deduction" as deriving from principles present in the subjective human mind. The rationalist thereby derives the reason for existence not from the given moments of the living whole itself but from the products of the

human mind. Thus he splits the given and its reason for existence and reasons alienated from that given, i.e., things - in - their - universe process!

**b.** Hegel's speculative philosophy, however (which situates everything in "The Understanding") states, "to deduce something" is to show that it cannot exist and therefore cannot be thought of except as "a moment" (living part) of "the living whole." To point out the meaning and place of each moment - e.g., a cat, a dog or a pen holder - in the living whole is to understand that moment. This is what Hegel calls "deducing"!

#### **4. 5. 4 *Destiny (Reductive)***

Bibl. st.: H.-J. Schoeps, *On Man (Reflections of Modern Philosophers)*, Utr./Ant. 1966, 119/141 (Franz Kafka (The Faith in a Tragic Position)). Schoeps, himself a Jew like Kafka but turned Catholic, knew Kafka (1883/1924) personally. We briefly outline what he says regarding Kafka's cultural criticism.

***The fact.*** Kafka was personally - psychologically deeply affected by the fact that our modern culture allows the people who live included in it to become a powerless part of an encompassing machine in which man becomes more and more "a thing - in - a - machine." Like a spool of yarn within the workings of a modern weaving mill.

***The uneasiness.*** With such fate - Kafka takes an interest in fate and destiny - goes a deep uneasiness that expresses itself in asking questions about reason and meaning of such a situation. Main question: "What is the reason for the pressure that our culture exerts on us who live in it, and immediately for the uneasiness that springs from it?".

***A talmudic end-time doctrine.*** Schoeps believes that one of the insights that impressed Kafka can be found in the Talmud, i.e. a set of studies (Mishna and Gemara) on the law, respectively the laws of Moses. The Talmud originated from the IInd to the VIth century and played a major role in Judaism. As a Jew, Kafka was familiar with it. Well, in these texts there is a prophecy of doom: "At the end of time, the faces of men will be like the faces of dogs." This as a sign of the deviation from "the laws" that Judaism preaches. Yahweh's world order, if violated, "avenges itself" in the form of a cultural order that is more disorder than order and thus creates uneasiness. So the "reason" Kafka sought would be found in that teaching of the Judaic tradition.

Kafka, however, although originally Jewish, was - according to Schoeps - he lost his faith. In this sense, Kafka was "modern. But such that he realized that modernity creates an unsavory culture: the absurd. Purely logically, 'absurd' means "all that is absolute nonsense." In Kafkaesque language, 'absurd' means a soul-state that no longer understands its own situation. Kafka - once outside the Biblical tradition - was confronted with the fact, an absurd culture, but with the question, "What precisely is the mysterious reason for this?" He underwent, with so many contemporaries, an "X," an unknown, an "X" that, however, determines destiny and co-determines life, including modern life. Not an innocent symbol shortening as in mathematics when it uses the term "X. But an everyday 'X' that weighs on life.

One can see that with Kafka the science of fate is reductive reasoning: from inference - a warped culture - to reason, for him who lost his biblical faith, an "X. Most of his mysterious works translate into sometimes very imaginary seeming histories - think of *The Castle* e.g. - his reductive destiny.

#### ***4. 5. 5 Lemmatic - analytical reasoning***

"One of the most fruitful methods of modern mathematics, the 'analytic' principle, is of ancient and specifically of Platonic origin: of Plato it is reported that he was the first to provide research by means of 'analysis' to the Thasian Leodamas (*Diogenes Laërtius 3: 4*). " (*O. Willmann, Geschichte des Idealismus, III (Der Idealismus der Neuzeit)*, Braunschweig, 1907-2, 48).

A reduction ('analysis') runs into a GV. (GV = in Dutch : gevraagde, the requested). It can advance only if the GV which is an unknown is provisionally 'filled in' by a 'guess' (not without some reason of course) called by Plato 'lemma' (in logic a preposition, in rhetoric a GG (in Dutch : het gegeven, what is given) to be developed). The lemma is the provisional name of the GV (unknown): one thus pretends that the GV was already GG!

***Paradigm.*** The students are with Miss Anita in the forest. GG - "Look, Miss, a feather!". GV - The teacher: "Which bird does that feather belong to?".

(1) ***Lemmas.*** One girl says, "Of the black blackbird." Another: "No! It's not black enough for that! It's from a thrush".

The names given by the girls are not given haphazardly. (A) The children's observations (B) together with their available knowledge of birds (C) depict themselves in their guesses, i.e. lemmas, preliminary models of the GV, the original.

The GV is a generalization: as the part stands to the whole, so the plume stands to the whole bird. For the plume does not resemble the whole bird but is related to it. The GV is the definition of the whole into which the plume fits.

***Detour Reasoning.*** Since one does not know the GV as not GG, one seeks it by the detour of a lemma, a conjecture ("hypothesis"). In this the lemmatic-analytic reasoning resembles the proof from the incongruous, in which, if the lemma is true, the incongruous follows from it and thus the lemma is to be rejected where in the lemmatic-analytic reasoning, on the contrary, it anticipates the sought as a model to be tested.

**(2)Analysis.** That is the testing of the lemmas. Back in class. The Miss takes out her beautiful bird book full of color pictures. She first shows the black blackbird: "The plume is too brown, Miss!".

**Note:** The comparative method! The model (lemma) is tested against the original. She shows the thrush: "That looks much better!". She also shows the female blackbird: "Hey! It could be from one of those too!".

***Undecidability.*** The children decide that the plume could be either of the thrush or of the female blackbird. Within the data, the GV is not unambiguous. Result: undecidability! One knows which bird to exclude but the question of which bird the plume does belong to is stuck with more than one answer because each of the two answers can be argued for.

So one sees that Plato introduced a two-stage algorithm, first the lemma as a preliminary OPL, then its analysis with the desirable result being the OPL in the form of an unambiguous answer.

***The analytic method.*** This name is a synecdoche: one says "analytic" (the part) but means "lemmatic - analytic" (the whole). O.g. the language-economic principle that says, "Why say with more (words) what can be said with less (words)?". All the tropes, metaphors, metonymies, synecdoches testify to this parsimony.

#### **4. 5. 6 Investment between chance and fear of losing**

Bibl.st.: A. Gosselin, *La psychologie de l'investisseur (Entre le hasard et le peur de perdre* in: Le Temps (Geneva) 12.11.2001,27). Steller, a specialist on investing, emphasizes two basic aspects of investing. We dwell on them because gambling is central.

**Part 1. Gambling.** A psychologist from a London university and the Barclays brokerage worked out an experiment. The aim was to determine the proportion of chance and skill in the stock market transactions of individuals. A financial expert counted on professional experience, an astrologer on the laws of astrology and a four-year-old girl on the tarling method (pure gambling). The stock market figures were down. At the end of the week, little Tia lost only 4.5% of her capital, the expert 7% and the astrologer 10%.

The coincidence theory regarding stock market transactions seemed clearly confirmed. This while stock market people show a strong tendency to attribute fortunes to their own expertise. But North - American and European investors are gradually appreciating the chance theory. Along these lines, Prof. Burton Malkiel, *A Random Walk Down Wallstreet*, argues that the short-term outcomes of the stock market as a whole or of any single security are unpredictable. The only thing that is certain is that in the very long term (10 or 20 years) the stock market as a whole is very likely to rise.

**An experiment.** The Wall Street Journal set up a contest in 1978. Each month, professional investors were invited to choose a title whose six-month return was calculated. This was then compared with that of four titles selected by a throw of darts on the pages on which the newspaper's stock quotes are listed. After 10 years (in 1988) "dartboard contest" (show of strength via a bird pecking disc), it was found that professional investors won 61 out of 100 initial contests.

**Clue.** That result seems to contradict the chance theory. Several university squads deny it based on deviations in the competition.

(a) Titles chosen by professional investors enjoy a non-negligible publicity effect as they rise sharply from the first day they appear in the daily newspaper.

(b) The Wall Street Journal publishers do not calculate the profit of actions in dividends (profit shares) but only capital gains. Well, the haphazardly chosen titles have as dividend yield 2.3%, while those of professional investors have as dividend 1.2%. Which makes a remarkable difference when one takes a compound return as the norm.



So much for the "gambling" aspect The chance theory seems to be the correct one. At least to a certain extent as Prof Malkiel claims (regarding the very long terms, a very likely non - chance outcome seems to be a fact):

**Note:** One of the two Nobel laureates in economics, Robert Eagle, prof at the Univ. of New York, was awarded for his contribution on the hitherto prevailing incalculability of temporal static series. Based on Eagle's achievement, one better understands stock market operations such that they become predictable. (F. Lelièvre, Les Prix Nobel ordonnent le chaos des statistiques, in Le Temps (Geneva) 09.10.2003, 21).

**Part 2.** "He cannot stand his loss." With this phrase of the common sense, what follows can be summarized. Steller asserts, "One of the means to success in investing lies in controlling the mind's reaction to failure." He explains.

(a) Psychologists measure - by means of an operational method and thus with equipment - reactions of mind. They discover that after an unsuccessful gamble the mood reaction is at least twice as intense as the satisfaction after a win. Briefly put: finding a 100 euro bill on the street makes one satisfied but losing the same bill is emotionally much worse.

(b) Psychologists call that phenomenon "loss aversion." Consequence: investors want to run rather high risks to undo a loss. That attitude has caused millions of investors to suffer large losses.

Shefrin and Statman, researchers on financial behavior, found that investors tend to sell their profit-making titles far too early and keep the loss-making ones far too long: "They don't want to know that a title was in fact a bad choice." Result: mediocre performance of their securities holdings ("portfolio").

T. Odean, also a researcher on financial behavior, even measured the phenomenon in the field itself: he checked the accounts of 163,000 clients - most of them independent investors - of an American discount brokerage firm. He found that a title that yielded 70% profit was more likely to be sold than a losing title! In summary: (a) investors cherish the hope that a loss-making title will return to the level at which they bought it; (b) investors don't give enough time to profitable titles.

Gosselin cites Françoise Giroud, writer and journalist, as consolation for those who find it difficult to take a loss: "What is fascinating about stock market money is that, if one loses it -

for example, when the stock market is falling - it swells into nothing: it goes into .... no one's pocket". As far as what the author says.

Note: If one takes into account that stock market transactions represent a not small portion of the financial and the entire economic world, and one also takes into account that they are controlled (to a large extent) by chance (at least according to the theory of chance outlined above) and by the reactions of the mind (if profitable, then more likely to let go; if loss-making, then more likely to hold on), then this twofold fact still gives food for thought!

If only because the monies "traded" on exchanges are, for too long, the wealth earned by working people. A moral question arises.

**Note:** Regarding the theory of chance, the following. The "ontological" question arises:

"What right happens every time someone buys a title? Certainly profit is the motive. But objectively, there is always a reason that decides that the choice "causes" either profit or loss or perhaps balance between the two. It is a causal process that has a prior, the reasons, and a sequel, the results. Is it not true that the investor's choice is situated in his personal course and that by choosing a title his course meets the course of the title (i.e., what the title represents, the owner and his economic course) and thus immediately becomes subject to what weighs on that second course regarding fates? But as an investor, who knows "what weighs on the title and its course"? Consequence: this absence of knowledge - add to it the lapses of the other investors buying the same title who are strangers to a very large extent - causes a tangle of influences (reasons) that is opaque and thus appears as accessible only through a gamble, i.e. a haphazard act. But that is not objectively a coincidence: it is a coincidence if one thinks of only one course of action, i.e. the investor. Once situated within the encompassing (global, integral) framework of said tangle of factors, there is no coincidence. At least no proven coincidence. This explains Malkiel's theory of long-term investment.

#### ***4. 5. 7 The concept of chance in theories***

Bibl. st.: J.P. Thomas, *Contingence*, in: D. Lecourt, dir., *Dict. d'histoire et philosophie des sciences*, PUF, 1999, 239/240; 1. Gayon, *Hasard*, in: id., 475 / 477. By way of introduction, Thomas defines "contingent" (chance) as "that which, though it exists, might as well not exist. Yet what Gayon says briefly is of a much more thorough nature.

**Coincidence.** Our definition reads, "A course, if it involves a non-deducible event, involves chance." One of the most curious models offers a steerable gradient:

"A goal-oriented course, if it is compromised o.g. by a deviation, recovers itself (feed back). The deviation, if it is not in any way deducible from the steering course, is a coincidence." The peculiarity of steering science is that it aims not only at the goal but also at the deviations from it that can be recovered. Therefore, steering science is also chance management.

A. Cournot (1801/1877; *Exposition de la théorie des chances et des probabilités* (1843)) defines coincidence as "the connection or meeting of phenomena that belong, in terms of causality, to independent 'series' (runs)." Model. A person travels by train and dies in a derailment. The journey is the basic course; the train is the second course; the derailment shows a course alien to the train. The latter course disturbs the second that disturbs the basic course.

Each time because, as Cournot says, there is "encounter. From the basic sequence, the train sequence is not deducible, and from this train sequence, the derailment is not deducible (implying that there is not - predictability in play).

**Criticism.** E. Nagel, *The Structure of Science (Problems in the Logic of Scientific Explanation)*, London, 1961, is quoted by Gayon: Cournot's definition is valid only if a finite, surveyable number of causes determine the course. Well, every physical event is determined by an infinite, unordered number of factors. Only - Nagel always says - an experiment exposes all the factors of an event except one, namely the factor studied (which one makes vary).

**Criticism.** Nagel forgets that only necessary is that the lapses in question be mutually independent (however many there are in the environment). Well, the train course (with its derailment course) is independent of the journey and certainly not deducible and predictable from that journey itself (precisely because of its independence).

Coincidence exists as long as a gradient is viewed purely in itself. Necessity, however, is there as soon as a gradient is situated in a global view, i.e. including a disturbing (anomaly-causing) gradient so that Nagel's criticism is irresponsible.

**Gayon's three definitions.** He dwells on three interpretations.

**1.1. Happiness.** Aristotle (physica 11: 4/6) to the point. A person digs a well to plant a tree (basic course) and - by "luck" - finds a coin (second course). Aristotle's definition: "A purposive (happening purposefully directed) course, if it achieves a result not expected, involves chance precisely because of that." He apparently defines within steering perspective with the

understanding that the 'deviation' (the coin) is a fortunate deviation, which does interrupt the basic course but enriches it with an unexpected 'goal'. He distinguishes: any accidental "luck" (or "miscalculation") is an "automaton," a "luck" encountered within a purposeful course is "tuchè" (which is thus one kind of automaton).

According to Gayon, such definition is folk but it is still common e.g. in biology: a "variation" (now they say "mutation") within a species that adapts it to the environment is "lucky" for that species.

*Note:* The notion of serendipity - a forager, while carrying on an investigation (basic course), discovers a valuable insight in another domain (second course) - is an application of Aristotle's definition (and tuchè because, even though the forager does not realize in advance what he will find laterally, he still appreciates it as a sought happiness).

**1.2. The haphazard.** Model. Someone throws a die. The basic course is the movement of the die. The - as Nagel states - innumerable causes that have physically its lapses in and especially around the die also determine the fall. These courses cannot be deduced and predicted from the basic course considered in itself. So from the basic course in itself there is coincidence. In itself, the course with the fall is strictly co-determined by even deterministic causes. But cognitively, i.e. if one would like to deduce from the basic course the whole trajectory, this does not succeed because our knowing falls short Aldus Gayon. Thus, in Mendelian genetics, arising from parents who both exhibit as genotype Aa from descendants who exhibit as genotype AA is not deducible.

**Probability calculus.** Gayon argues that here probability calculus offers a solution: one can calculate the frequency of "chance. But the frequency of chance is not simply the essence of chance. It is the deducibility from the basic sequence that is decisive. One deduces a frequency but leaves that which is frequent untouched.

*Note:* Gayon refers to quantum theory as a violation of determinism. We return to this elsewhere (cfr. 4.7.6). Yet this: as long as, concerning necessary courses - whether they are purely physical, biological, psychological, sociological, medical, economic or whatever - one does not raise the reason axiom, the question of the essence of "necessary course" will come across as without adequate reason. What has its reasons is determined by it, and what is determined by something is not simply accidental.

**2. Theoretically non-deducible.** Model. Within the Galilean law of the fall of bodies, the acceleration factor  $g$  is not deducible. One knows it thanks to observations. And  $g$  is chance. However, within Newtonian physics, if certain conditions are fulfilled,  $g$  is deducible. And thus not a coincidence. In this sense, Newtonian knowledge is predictive. Gayon laments that, in particular, biological science is so little predictive. Note: What then to say about the course that the human sciences have as their object? It is here that we situate destiny (about which more in other chapters). Fate is more often than not unpredictable. Surely all human beings experience this. But, situated within the sphere of the reason axiom, every fate - however capricious - has its reasons that determine it. If not, we are down to irrationalism. That is the last thing a mind still possessing "resilience" will accept.

#### **4. 5. 8 Freedom and legality**

Man undergoes the laws of reality, but he also controls them: if he determines that water boils at  $100^{\circ}$  C., he integrates this natural process into his goals and thus behaves in a controlling manner.

**Law.** The formula of a law is, "If what goes before, then necessarily what follows."

One paid attention to the "if (happened), then (necessarily)" connection.

**Mastery of law.** Man, if he determines that, if at  $100^{\circ}$  C, then water boils, discovers his own possibilities: he himself defines the "if" to force the "then" to occur. 1. He experiments: brings water to  $100^{\circ}$  C to see if it boils. 2. He applies: brings water to  $100^{\circ}$  C to dispose of boiling water. One paid attention to 'to', sub-terms expressing the steering (purposeful) aspect: the 'if' is there for him 'TO' the 'then' 'To' or to test or cause.

**Law formula.** 1. On the factuality of the "if" (here:  $100^{\circ}$  C), the law does not pronounce itself because the formula is hypothetical. 2. But about the factuality of the 'then' (here: boiling water) the formula is formal: (if condition, then) the consequence necessary.

C. Lamont, *Freedom of Choice Affirmed*, New York, 1967, 56/96 (*Contingency and a Pluralistic World*), terc. O.c., 60. "In any 'if, then' - context, the law does not decide the actual occurrence of the 'if' - condition but rather the certainty of the 'then' sequel." Steller uses the term "coincidence" in two senses.

1. The pure one reads: "The concurrence of two or more lapses which are not related to each other in the form of a regular "if, then" relation". Such lapses may be totally necessary in themselves but their intersection from the laws that happen to be at work in each of those lapses considered separately is not deducible and thus not predictable.

2. The applied. 'Coincidence' is then 'useful chance', 'controlled chance', if one will: 'chance.'" Lamont cites St. Lamprecht, *The Metaphysics of Naturalism*, New York, 1967, 192f.

Coincidence is often regarded as an alternative to mechan(ic)ism (understand: to interpret the universe as the course of a determined machine). In fact, chance is a correlative aspect of mechanical natural behavior. Natural laws are controllable in the "if" though mechanical in the "then".

***Coincidence as opportunity.*** Lamprecht continues. The presence of useful chance in nature is not evident at a glance.

1. A stone falls on a rock. Inanimate things respond to an instantaneous stimulus, let us be clear: to something superficial. They do not benefit from the "if" as the cause of the "then."

2. Humans as beings gifted with intelligence, however, respond to more than an instantaneous stimulus. They see in it an "opportunity," a useful event. They react to the instantaneous stimulus on the basis of their own possibilities. We saw this above with regard to the boiling point of water: the fact that water, once at 100° C, boils is an instantaneous event. But that man, armed with the observation "if 100° C., then boiling water," henceforth boils water, shows that he interprets the natural law as an opportunity, his opportunity, because he can test (experiment) or apply (technique) the process. He clearly shows that through the "if" he takes control and masters the "then."

Lamprecht. The alternative possibilities were there from the beginning of nature, even if they did not give rise to any significant exploitation before intelligent creatures appeared. In other words: no one saw them as opportunities, as (fortunate) coincidences.

**Note:** An acorn falls to the ground. It reacts differently from the stone that falls on the same ground: it germinates and grows up. If it is trampled underfoot, it still reacts in a steering way: it grows up crookedly but saves its growth. A squirrel sees the acorn not as an instantaneous coincidence but as an opportunity: it eats it to satisfy its appetite. If it has no appetite, it reacts differently. Grasses, twigs are not just pure chance but offer it the chance to build a nest with them. It is as if all that lives, on a pre-human level, sees "opportunities" and anticipates man.

#### **4. 5. 9 I could have acted differently**

Bibt. st.: C. Lamont, *Freedom of Choice Affirmed*, New York, 1967, 151/163 (*Regret, Crime and Insanity*). Steller retrieves R. Demos, *Human Freedom (Negative and Positive)*, in: R. Nanda Anshen, ed., *Freedom (Its Meaning)*, New York, 1940, citing: "Freedom shows itself not only in acts of conscience but in fact precedes it. One can be indifferent as to whether one is acting rightly or wrongly. One can neglect one's duties when making decisions. Yet in the course of deciding, one will be aware that one is free because choosing for or against the recognition of conscience is itself a free choice."

**Paradox.** "The good that I would like to do, I do not do. The evil, however, which I would not want to commit, I do commit". (S. Paul, Romans Letter 7: 19). This leads to "I could have acted differently." As I. Kant (1724/1804) emphasizes: the confession "I should have (acted differently)" foregrounds the freedom of "I could but I am not compelled."

Temptation seizes the opportunity. In a fit of rage someone kills his wife. This rage has its own course such that, if it can run its course, it seizes the opportunity up to and including killing. It is the nature of every temper or passion that it can interpret chance as opportunity. If the perpetrator, having calmed down, looks back on it, his act becomes something repulsive to him: "I should have acted differently. Basically, I knew I could act differently but I didn't get around to it".

**The I does not seize the opportunity.** The language of regret mentions the subterm 'I' in "I should have", "I knew", "I could", "I didn't get around to it". Indeed, the I has its own course, governed by other presuppositions than those of the drift (anger e.g.) such as there are reverence for other people's lives, crime as to be avoided, regret (regret, remorse, remorse). But the imposing course of anger met the course of the conscientious I and robbed it of its power: "I did not come to it." That intersection has the structure of chance: from the normal course of the conscientious I, the intrusion of the course of anger upon it is not deducible and therefore unpredictable. This gives the impression of being surprised (by passion, rage e.g.): the perpetrator had never thought of killing his wife.

**The self seizes the opportunity.** Just as the self, confronted with causal processes outside man (if cause, then with necessity consequence), tackles them in their 'if' (in experiment and technique), so the self, confronted with lapses in man, can tackle them in their 'if' and, if chance

arises, seize the opportunity to push through its own axioms and thus slow down the course of e.g. a passion left to itself. That is called "self-control," understand: passion control. That is freedom (from passion compulsion e.g.).

**Regret as a Phenomenon.** W. James, *A Pluralistic World*, New York, 1925, is quoted. "If murderers and untrustworthy people are no longer sinners, then every regret is theoretical nonsense and error (...). What can be the meaning of the fact that, because we have gone the wrong way, we condemn ourselves, unless we are not compelled to such things, and so we could just as well have gone the right way? I cannot understand the will to act (...) separately from the conviction that acting can really be good and bad. I cannot understand the conviction that an act is bad apart from regretting it if it is done anyway. I cannot understand that regret apart from the existence of actual real possibilities in this world." In a determined world, such "possibilities," i.e. opportunities for interventions of the free self in its course, do not exist.

**Determinism.** M. Schlick (1882/1936) translates "I could have acted differently" into "I could, had I so decided, have acted differently but then I was someone with a different nature of being." Understand: "Had I been someone else, I would have acted differently". The course of the free I, in determinism, never crosses the course of biological, psychic and social nature and does not actually exist: there is only natural necessity. And the use of the term "I" is based on an illusion: there is no I!

#### **4. 5. 10. This little chapter summarized.**

*Antiquity, Egyptians, Greeks e.g. put forward a general cosmic law concerning fate. Everything that exists is given a destiny in the form of a dose of life force. This shows a cybernetic structure. Whoever assumes this as an axiom of life assumes that evil, however committed, will be punished. Mentalities posit axioms as "reasons" and infer inferences from them.*

*"It had to come." Or if the omens, then the sequels deducible. Thus both common sense and "historical reason" make facts rationally transparent. Such historical reason was especially central to Hegel: what happens is logical. At least if one has sufficient information about it. In the absence of this, what happens can appear as meaningless. All that ever existed, now exists, ever will exist, Hegel called "The living whole." To deduce something is for him to show that it can only exist as a living part of the whole.*



*For Kafka, man in our culture becomes more and more a thing, which is accompanied by a deep uneasiness and the question of the reason for this. He believes that something deep within man has deviated, which avenges itself in a form of disorder in culture. Kafka reasons reductively: of a warped culture, he searches for its reason.*

*In lemmatic - analytic reasoning, a lemma or hypothesis is preconceived that is then further investigated. Thus, one pretends that the GV was already GG. This method was introduced by Plato.*

*An experiment on financial investment seems to confirm the theory of chance in stock market transactions, where traditionally it was attributed to the skills of stock market specialists. Another experiment seems to contradict the theory of chance. Coincidence theory seems to have some influence. The fear of losing also plays a role in investing. Failures would weigh heavily psychologically and lead to higher risks to want to undo such a failure. Through stock market transactions, the entire economic world is subject to a certain form of gambling and mind-reaction. Which is nevertheless food for thought.*

*Coincidence can be defined as a course that involves a non-deducible event. A controlling course attempts to control chance. Coincidence exists as long as a course is viewed purely within itself. However, there is necessity as soon as a sequence is situated in a global view, i.e. including a disturbing sequence.*

*Gayon dwells on three interpretations of chance. It can involve luck, it can come across as haphazard, and it seems theoretically non-deducible. However, as long as one ignores the reason axiom, the question of the nature of the course will remain unanswered. Every fate has its reasons that determine it. If not, we are down to irrationalism. And that is the last thing a person wants to have conscience.*

*Man undergoes the laws of reality but he also controls them. Laws talk about an "if, then" relationship. The "if" is there for him, to test or cause the "then. Coincidence then is there on the one hand in the concurrence of two or more lapses which are not related to each other, but also in the form of "useful coincidence." Man through the "if" takes control of the "then" and controls it. In other words, man sees them as opportunities and happy coincidences.*

*Deciding something, whether in accordance with conscience or not, is in itself a free choice. If a person is overcome by anger, it can drown out the voice of conscience. The self does not seize the opportunity to do justice to the conscience. Things could have been done differently. Man could have dealt with the course at his "if," and at the "then," let his own axioms push through instead of letting a course e.g. be controlled by a passion. Then he really came to self-control and to freedom precisely by freeing himself from this compulsion.*

*So much for this sample of deductive and reductive thinking.*