At high school, I was good in mathematics, chemistry, but composing chess problems was harder. Trying in my 17, it took me 6 months with breaks to do publishable compositions. My classmate showed me how to solve newspapers' problems. Before I had thought it was as chess. Unable to understand it, I told myself: 'only total idiots pay attention to such uselessness'! Once got it, its combinations fascinated me. I was admiring problems of American Sam Loyd or William Shinkman, thinking: more hidden solution, better problem...

Composing was a lot harder than solving. Even simple problems without extra pieces (3 rooks, 2 queens...) were uneasy to do. I tried to construct a tricky solution, as 'hard to solve' was the sole criterion for me. After a few months break, in February 1994, as already a student of psychology, I visualized a solution without a threat: mates happen because black must move (losing tempo). And the same mate unusually repeats with different motivations. Then I added extra units in the left top corner to confuse solvers more.

A month later, I visited Bratislava's chess composition circle of Bedrich Formánek (President of the FIDE for Chess Composition), to show my jigsaws. The present composers couldn't resolve my problem easily, so used PC. Bedrich said he'd publish it next week, without non-thematic units in the corner. I was disappointed, thinking it had been better (harder) with the removed units, but pleased to be in newspaper Pravda. Later, I grasped that anything extra to express idea, spoils a clarity. It is 'economic criterion' generally true in all fields, but only chess composition shows ideas with such a purity.

Bedrich was sending me composition journals, where I read: 'reciprocal change', 'cycle', 'thematic', 'set play', 'paradox', 'new strategic'... All had seemed irrelevant till I compared 'try' and 'solution' in one reciprocal change: 2 mates exchanged for the same defences: so beautiful! It is 'New Strategy', a mental figure skating or gymnastic, defined by Italian Alberto Mari in l'Echiquier Belge (1928): multi-tiers changes of mates, functions, motifs...

Chemist J. Crusats told me a moment he got it: "Oh my God! The world should stop to admire this!" 20 years after, composers have adopted it. 'Hard to solve' criterion has remained, the 'new strategy' has added the higher order logic. Being depressed for a while because of my misapprehension, I've finally made 'new strategic' problems including the most intricate: cycles. E.g. Mate in 2 in Dutch Probleemblad, is the cycle of threat and 2 mates against 1 defence (3 tiers, 3 paradoxes, 3 mates): Ukrainian or cyclic le Grand. Next 2 diagrams are: reciprocal change in Mate in 3, and a total cycle of threat and mates (Shedey cycle) in Mate in 2 with fairy units Grasshoppers, and my own rule redefining mate: Mate with a Free Field (MAFF). British mathematician Cedric Lytton named it so, joking it was: Ministry of Agriculture, Fisheries and Food.
From 1994 till 2000, I made over 200 compositions, mostly reciprocal or cyclic shifts in Mate in 2, Mate in 3, helpmates, self-mates, fairies, winning several international prizes. In 1995, I defined a new class of the rules redefining the mate: **MAFF** (mate with a free field), **OWU** (one white unit in the black king’s field), or mating conditions: **AMU** (mating unit must be attacked before moving), **UIA** (the same color unit must be in the activity of the mating unit). The focus on the aim (mate), separates them from earlier fairy rules redefining units: Grasshopper, Vao, Pao... or conditions: rebirthing unit (Circe), paralysis of units (Madras). The mate’s redefinition opens the new infinity: mate with 1, 2, 3, ... free field(s), or mate with 1, 2, 3, ... black or white unit(s) around the king, etc. Moreover the free field can be 2 (or more) fields from the king, or black / white unit may be 2 (or more) fields around the king... It means: the mate is only one of countless options (set), like irrational numbers in mathematics. And the same composition can be anything based on mate’s definitions, conditions.
In the article 'New Ideas in Chess Composition' (see appendix) published in American journal StrateGems (2001), I summarized the new rules and introduced my last idea: Quasi-Pseudo theme, applying mate redefinition to the new-strategic theme itself. The mating field is moved by one field (or as it is redefined) in respect to the 'same mating field of the same mate' in the other layer (phase). It seems too deviating from conventions resembling abstract 'art'... But it is still exactly defined, being so rather like Impressionism: a bit smudged line (=deviating logic) reflects the reality. Ceaseless redefinitions in chess composition could result in other arts or new computer science. Why so to compose chess problems, and not to focus on something with higher socio-economic return? And how chess composition could arise?

The chess problem (mansuba) arose in Arabic Empire, to bet money whether solvers resolve it. In my Phd in economics, I studied a concept of alternative activities: rent-seeking, litigation, speculations.. pursued by the talented, if productive fields are inaccessible. The chess composition (or chess), could be kind of the alternative activity. It would explain why Russia or socialist states with less opportunities were more successful on average in chess / chess composition than West. Czech weekly Respekt (2003), published my interview with a renowned economist William Baumol about it: The discrimination of blacks has increased the number of jazz composers.

Mr Baumol split talent of entrepreneurs and talent of scientists / composers, while I emphasized the intelligence is one. There is a difference between verbal and performance intelligence, but they correlate. It is improbable a person strong in math, is weak in verbal or so called 'social intelligence'. He admitted it, saying I should rather ask a psychologist. I hid I was a psychologist that developed new methods to assess intelligence and creativity, capturing a creation of logical series. I show the results and concepts, including explanation of psychosis, of my MA theses and grant research in: Personality Model. The problem with 'talent of entrepreneur' is that it statistically depends on social status too, when the poorer have a lower chance to be entrepreneurs (or artists), regardless of talent. In 1999, I tested over 600 people variously grouped (people in psychotherapy, artists, mathematicians) including chess composers. There was a statistical difference in the quality of prejudices e.g: Western composers were more tolerant (as people in psychotherapy), unlike slightly less tolerant Eastern Europeans. It could say Westerners composed chess problems for its psychotherapeutic effect, while Eastern composers sought status. Lack of opportunities and level of intelligence lead to 3 types of alternatives:

1) sophisticated: philosophy, chess composition, logical puzzles / games, chess
2) rent-seeking: litigation, financial dealings, etc.
3) pathological: neurosis, psychopathy, psychosis.

It was a part of my Phd thesis, published in Slovak weekly Slovo: Redirection of talent, later generalized by a concept of Maximization of Uniqueness.
In 2002 I interviewed Bedřich Formánek (President of FIDE for Chess Composition 1994-2002) for weekly Slovo: Figure skating in thoughts. No surprise, he refused 'chess composition is an alternative', stressing its uniqueness and irreplaceability. Bedřich was a key figure promoting chess composition via newspapers' columns, meetings, contests in Czechoslovakia and Slovakia. Many Slovak composers have appeared, inventing sundry cyclic prototypes, including the first cycle: Lacny theme, 1949. I knew it might be offensive to say: 'people invest their talent to chess composition (or other things) as they didn't find a way to make money'. But I've never said it was useless to compose or solve chess problems, I just wanted to explore motivation. Sure, 'all maximize profit' is an oversimplifying interpretation of 'market economy'. And a comparison of socialistic and historically richer Western countries seems politically biased too. Not sure 'market economy' provides more opportunities. E.g. a very damaged Soviet Union in WW II, was able to launch the first man in the space (1961), requiring a huge talent. Many underlines backwardness of civil production e.g. cars... 'Scale effect' in economics is: the bigger economy, the higher variety of products. Soviet Union (1922-1991) had a lot smaller population than Western economies, so it couldn't develop sufficient civil production, particularly if it spent resources on arms. In spite of hysteria about 'communism' (that never existed, as it means: no money) or 'socialism', the difference between 'socialism' and 'capitalism' is quantitative: what is allowed to own, with possible qualitative implications. The more things (factories, banks, pensions, etc...) are privatized, the more capitalist. And, the smaller private ownership, the more socialistic. But even the purest capitalism let something public e.g. air, language etc, and the purest socialism let something private e.g. dress, dish, etc.. Some socialistic states could be closer to some capitalistic, than some other socialistic states. E.g. former 'socialist' Yugoslavia could be closer to 'capitalistic' France or Sweden, than 'socialistic' China. And 'capitalistic' France or Sweden could be closer to former 'socialistic' Czechoslovakia than 'capitalistic' Brazil. So, 'capitalism', 'socialism', 'market', etc insufficiently defines the system, containing all to some extent... And it may be true there were / are less opportunities in Eastern Europe, but not because of 'socialism'. In contrast, the rise of chess composition in socialistic states could be a spill-over effect of the 'construction spirit' of socialistic ideology (emphasizing production and manufacture).

Chess composition has spread mostly in Europe, USA, Australia, Canada, Latin America (Argentina, Brasil), India, Indonesia, some Arabic countries, and a few other (Israel, Cuba, Singapore), but no in China, Korea. It has been more presented in Japan since 1990s. Speculatively, it could be because of economic stagnation, forcing Japanese to alternatives including chess composition (it would require data from other 'alternatives' to confirm).

Since 1990s the young started being less interested in chess composition in Eastern and Western Europe, which could be due to the rise of computers. Like an invention of photography and video diminished the significance of painting, the computers and later internet redefined the art space. Traditional art forms (incl. chess composition) lost its attraction, audience. It was my personal case too, having a computer (as a teenager I had no PC), I ceased composing chess problems to start programming. Knowledge of chess composition helped me to develop efficient functional programming system www.each.co.uk. And the principle of new strategy inspired me to create artistic video/animations.
There are 2 ways to preserve chess composition:
1) To accept it as a new field: part of logic / mathematics at Universities / schools, suitable to develop logical thinking or aesthetics.
2) To transfer it to practical things e.g. computer science, or more intelligible: visual art, literature...

A gradual loss of interest in chess composition since middle of 1990s, is a wider phenomenon inexplicable only by the rise of computer, as the quality of art in general (even the notion of the art) has declined. Although computer and internet radically enhanced the ways to create (mixing image, sound, interaction...) and disseminate art, so far it hasn't resulted in higher art forms (or at least haven't been publicly recognized). The sole criterion of art has become to commercialize a medial attention, no matter how achieved. Classic criteria: novelty, intricacy, quality, are marginalized by stressing 'subjectivity' and its critics are ignored... Duchamp's *Fountain, 1917* seems like a prophecy: anything exhibited (getting attention) is art. The situation isn't new as periods of high and low arts always existed. Except talent, an opportunity must appear to enable a new high art like Renaissance in Italy, Impressionism in France, rock music in UK... The new art may reappear, as a new 'inner' criterion arises. PC and internet opened new options, but the new criterion is so far unclear. Software's functionality / style could be one, but commercialism overshadows its potential. It seems monopolization of the art market depending exclusively on adverts, halts the new art to arise. Prominent art critic Dave Hickey said (2012) the incompetent rich art buyers greatly overrated contemporary artists, adding: "At the moment it feels like the Paris salon of the 19th century, where bureaucrats and conservatives combined to stifle the field of work. It was the Impressionists who forced a new system, led by the artists themselves. It created modern art and a whole new way of looking at things."

...Lord knows we need that now more than anything. We need artists to work outside the establishment and start looking at the world in a different way – to start challenging preconceptions instead of reinforcing them." Likewise the art historian Harvard Benjamin complained (2016) that market became an exclusive criterion, distorting a real contribution. The commercial success is a criterion, but only secondary, which is often interchanged. Firstly, a real art must meet an 'inner' criterion (independent of market) and then, according to rules, deviate from it. A figure skater must jump a pirouette to make it differently or add anything (e.g. extra pirouette). A pirouette is a criterion, that must be satisfied (properly jumped). Otherwise it can't be counted. And e.g. abstract 'art' has no criterion (pirouette), that's why it is a pseudo-art, although it is traded in large amounts. Without a criterion, anything can be 'art', disabling a high art to be recognized. An

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Bedřich Formánek, 1933
President of the FIDE for Chess Compositions, 1994-2002

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**L'Acrobat**
Miro Brada (2007)

après Picasso (1930)
Dadaism’s criterion is to reject all criteria. No surprise, it was politically linked with a radical left... Anything presented in art galleries is art (i.e. money, politics stands above 'art').

Acrobat could, instead of pirouettes, make a striptease to claim it's unique, as no one had done it before. But anybody can do striptease (it's trivial), while only few can jump a pirouette... To do anything 'crazy', 'funny', 'creative', isn't enough to be art, regardless if it is 'authentic'.

The first criterion of art, results from a competition or comparison (zero-sum game in economics). Figure skaters don't directly compete, but finally they are compared, according to quality of their performance, by jurors. The criteria differ by quality: in football it is a number of goals, in gymnastics it is a intricacy, originality, style... Football fans can appreciate nice combinations too, but the only criterion is a goal. Higher arts define and meet a non-trivial criterion: a higher order logic. Like mansuba (prototype of chess problem) defined the new criterion: White to move and checkmate Black in 2 (or N) moves against any defence. It meets the chess rules, and adds the new more intricate criterion. Then New Strategy meets both chess and chess problem rules, and adds the new criterion: change of functions in different phases. In general, art must meet predefined or newly defined criteria, whose quality determine the quality (highness) of the art.

The higher order logic in art is same as in science. E.g. a calculation of the rounded or curved space (globe, ellipse, cos / sin, $x^n$ ...) needed a higher order logic of calculus capturing 'infinity'. Earlier mathematics couldn't exactly calculate the curved space, as it led to infinite diminishing divisions. 'Calculation of the curved space' added a new criterion, promoting mathematics to higher levels.

A higher order logic (in art / science) arises when additional criterion is defined. It adds a new logic to exiting one, increasing its intricacy (e.g. logical series: rotating & diminishing & alternating & etc). It can't be discovered by computers, regardless of their capacity. PCs (or neural network) beat humans in chess, because the criterion 'win' is calculable. But PCs are impotent to compose a chess problem, meaningful story, music, etc. They can generate a scheme, verify its validity, but can't determine its meaning. A higher order logic like 'New Strategy', calculus, chemical equation, is created by a definition, not computed.

Many chess composers were very successful in technical fields - e.g. Hungarian inventor O. Bláthy. Why he invested some of his time in chess composition, and not fully in inventing (with higher probability of economic return)? According to Maximization of Uniqueness, people tend to spread their time (investment) equally across various activities / values (according to their intelligence and accessibility), because the total uniqueness is multiplication of all values. And $t \times t > (t - x) \times (t + x)$ - where $t$ is time spent and $x$ is difference between times across various activities.

A Hungarian electrical engineer. In his career, he became the co-inventor of the modern electric transformer, the tension regulator (voltage stabilizer), the AC watt-hour meter, motor capacitor for the single-phase (AC) electric motors, the turbo generator, and the high-efficiency turbo generator.

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One of my animations, shown in my solo exhibition From Animation, 2013, Holland park, London. An unexpected figure's rotation, shifting colours, positions.

British chess composer Jeremy Morse was a chairman of LLoyds. Why he invested some of his time in chess composition, and not fully in banking (with higher probability of economic return)? According to Maximization of Uniqueness, people tend to spread their time (investment) equally across various activities / values (according to their intelligence and accessibility).

Sir Jeremy Morse, 1928-2016
Sir Jeremy Morse, the former chairman of Lloyds Bank who has died aged 87, possessed one of the finest minds of his generation in the City of London.

J. Morse, Chess Problems, Tasks and Records, 1995: “The chess problem is arguably the highest type of problem or puzzle. It is much older and more widespread than the draughts or bridge problem. It is not confined by language like the crossword puzzle. It is less abstruse than the mathematical problem. Furthermore, its artistic content is richer and more easily appreciated than in other types of problem. Formal and strategic patterns abound, exhibiting such ideas as thematic unity, economy, paradox, reciprocity, asymmetry, and so on. This explains why the chess problem has an exceptionally high ratio of composers to solvers. Sometimes indeed the artistic element overshadows the original puzzle element, although ideally both elements should be present and in good balance.”
Composing chess problems, I used to listen to classic, jazz, modern music. From the classic I liked Bach, Debussy, Schubert, Chopin, Beethoven, Brahms, Mozart, Stravinsky etc. Listening Wagner's Tannhäuser overture (1845), I've got the idea of symmetrical new-strategic 3-mover with 2 variants of set plays and 2 solutions. Comparison of 2nd moves gives: 3 x 2 change (Zagorujko), 4 paradoxes (2 Dombrovskis, 2 Hannelius), 2 functions' changes (2nd x 3rd moves).

Juror Bedrich Formánek wrote: Excellent three fold three-mover, containing not only the tier change of the second moves of the white in two variants, but also the threats' paradoxes, changes of mates and various changes of functions of the moves. Motivation is not complicated, but engages by its wit (e.g. opening the lines via e6, opening Re1 by keys etc.). The modern composition, whose symmetry I don't feel as a shortage.

At that time I didn't know Tannhäuser opera's plot, but felt its controversy (non-linearity), being the impetus to my three phases' mechanism. Nietzsche being a close Wagner's friend saw potential of his music to rebirth a tragedy to fully affirm the life. He was read by writers (Mann, Gide, Joyce...), philosophers (Foucault, Sartre, Heidegger...), politicians (Mussolini, de Gaulle, Roosevelt...) artists (Dali, Bowie, Björk...), and his metaphysics of 'eternal return of the same' or 'superhuman' stands against the egalitarian morality fabricating 'bad' to blemish the stronger. But who is the stronger, and what are criteria?

'Whoever in power is stronger' is often untrue, e.g. was Galileo weaker than the authorities that silenced him? Were Galileo's ideas mere means to undermine the stronger authorities? Very few would agree... How then distinguish 'stronger' and 'weaker'?

People can be equally strong (or weak) in many areas, but statistically same person is stronger in one thing, while weaker or average in other. Is then a superhuman rather e.g. J. Sotomayor jumping 2.45m (1993) or business magnate B. Gates?

Those considered best do not need to be best either. B. Gates made money from programming, when minority had a computer. What would Gates have done, being born in Africa? Clearly 'stronger' or 'weaker' depends on society permitting or denying 'superhuman'. It rather confirms Nietzsche's 'reevaluation of all values' underlying relativity. In Wille zur Macht he disliked determinism and causality (past to future) dominated the natural science e.g. thermodynamics of Kelvin (1824-1907). He emphasized the will perpetually alters the finite state, kind of the 20th century quantum physics. At the same time he doubted 'probability' in exploration of the dynamic truth, contradicting his re-evaluation of values. Nietzsche's 'superhuman' or 'eternal return' would be then idealizations as Kant's thing in itself, Plato's pure idea, Rousseau's natural man... Nietzsche's philosophy is unfinished, because he didn't express dynamics of his ideas statistically (mental breakdown is other issue).
Look at 'mate in 2' to see the 2nd prize in the British journal The Problemist (1997), for cyclic change of key and 2 mates. Composing chess problems is a mental figure-skating, gymnastic, choreography... Jurors rank the best compositions according to their originality, intricacy, and economical construction.

'How difficult to solve it' had been the first criterion for the best compositions. Later Italians G Cristoffanini and A Mari (en l'Echiquier Belge 1928) focused on the change of mates (new strategy) to produce reciprocal changes of mates - a double jump (AB-BA). A cyclic change of mates - a triple jump (ABC-BCA) prototype was composed by Slovak L Lacny (1949), followed by Scottish N Macleod (1950), followed by the 1st quadruple jump (1955) composed again by Lacny, etc...

Picasso had defined sort of 'new strategy' in cubism (Les Demoiselles d'Avignon, 1907) changing the African masks' attributes. Likewise objects' metamorphosis by MC Escher (1898-1972), the time lines of Hitchcock's Vertigo (1958), the discrete energy elements: E = hv, of M Planck quantum hypothesis (1900), the discovery of infinitesimal calculus (new mathematics) by I Newton and G Leibniz in the late 17th century, 'Epic of Gilgamesh' from ancient Mesopotamia turning the fear of death into (one of) the first literature's form(s), etc...

The "new strategy" coincides with the Chinese ceaseless transition (change), challenging the 'identity' relation on which the European science clings. The identity in equations of mathematics / chemistry / physics, is illusion as the left hand side differs (by position, time) from the right hand side (Heraclitus panta rhei): P is not P. Understanding the "new aesthetics' behind the changes of the same units is a real personal revolution in thinking.

Am I exaggerating?
Not at all (pas du tout)...

MiRO BRADA, london, 4. MaY, 2010


My 3-mover representing Slovakia was the 6th (from 78 preselected compositions by every country) at the World Tournament 1996-2000, for theme: *The same line guarded by two black line-moving pieces (R+R or Q+B or Q+R). In at least two variations, self interferences occur on this line, either at Black's first move or at Black's second move.*

My idea appeared at one moment. Then I made the scheme in 30 minutes (in comparison, a few of my compositions took me 6 months). I used horizontal Rook + Queen line, interrupting (to defend) by black Knights, leading to intricate threat form of Lacny (or Dombro-Lacny, cyclic le Grand).

The British juror Professor of economics Robin C.O. Matthews wrote: *However, the top ten or a dozen problems turned out to be very interesting and original. Their composers showed great imagination as well as technical virtuosity. They found ways of showing the theme that had not occurred to me at all beforehand. But anticipation took a heavier toll than usual; the existence of the predecessor squeezed some of the affected problems of the top 24 although they were by no means completely anticipated. The theme made for heavy positions - only 28 out of 78 entries had less than 21 units. Many of the entries were closely alike. There seemed to me to be little to choose in merit among the entries that I have placed lower in the award, and indeed between them and some that were not placed at all. A different judge would undoubtedly have produced a different ranking. My congratulations to the successful composers, and my condolences to the others.*

Being the 6th among 78 world best compositions sounds OK, but I was disappointed, because it was the only cycle
in the tourney. Prof Matthews was exalted by my cyclic shift, but didn't like its symmetry: "it is an impressive achievement to show a cyclic le Grand in this theme, but the symmetry rather reduces the interest". But cyclic shifts are often symmetric, as they are the most intricate form in chess composition. E.g. one of the best new-strategic mates in 2: Lacny's 4-fold cycle prototype is symmetric too. However as in the figure skating or gymnastics, when jurors decide about the result, there is often a controversy about result. Mental activities, like chess composition, have no physical limits, and so there are more options than in e.g. gymnastics, which makes judgement even more difficult.

Appendix
This article introduces new ideas discovered a few years ago. First, I present to you MAFF (see definitions). In 1995, one of my acquaintances made fun of chess problems having the stipulation: 'error in two moves.' After 5 months, I defined MAFF. In 1996, Sachova Skladba published the first problems using MAFF.

Diagrams A and B are of MAFF problems demonstrating modern cyclic themes.

Diagram D is quite simple, but it shows another feature of MAFF: In the solution, White does not promote to Queen but to Rook because, if White had promoted to Queen, then Black could defend with Be3+ (3. White Qc2). If White promotes to Rook, then Black cannot defend with Be3+ since White would have to defend with Rxc3, which would lead to move 3 Rx3, and to the only black defense, Qxe3, and to an illegal mate.

The next two problems, F and G, prove that, by using MAFF, it is possible to compose complicated themes like four-fold Ukraine (F) without King defense, and total Lacry (G) with only two auxiliary Grasshoppers.
Diagram H combines MAFF and OWU, derived from MAFF. In 1996, I had been preparing originals with MAFF for Sachkova Stetlaba. Suddenly, I realized the possibility of using a unit, not only fields, to modify the mate. MAFF or OWU confirms that a mate is just convention, i.e., the mate can be defined numerous ways. (My last definition was UPA in 1996.) The common trait of such rules is changing the aim (not changing the means of achieving the aim, as in Madras or Circ.) Simply, the aim is not to give a check and occupy all squares around the enemy King, but to give a check under specific conditions.

M Theme: total threat form of Lacey
1. Bh5! (2.Qb6#), 1...Kb4 2.Qxd6#,
1. Kd4 2.Nc3#
2. Bd5! (2.Qxd6#), 1...Kb4 2.Nc3#,
1. Kd4 2.Nc3#
2. Nb2! (2.Nc3#), 1...Kb4 2.Qb6#,
1. Kd4 2.Qxd6#

H Theme: total threat form of Lacey
1. Be5! (2.Qxe7#), 1...Kc5 2.Qxe7#,
1...Kc5 2.Rxd5#
1. Bh4! (2.Qxe7#), 1...Kc5 2.Rxd5#,
1...Kc5 2.Qxe7#
1. Ne2! (2.Rxd5#), 1...Kc5 2.Qxe7#,
1...Kc5 2.Qxe7#

I Theme: threat form of Lacey
1. e3? (2.Rb1#), 1...Nxe2 2.Rf1#,
1...Nxe2 2.Qd2#, but Nb3!
1. e4? (2.Rf1#), 1...Nxe2 2.Qd2#,
1...Nxe2 2.Rb1#

J Theme: Kiss
1. Nd7? (22), 1...Ne4 2.Qxe4#,
1...Ne4 2.Rxf5#, but 1...Ne6!
1.Qc4! (22), 1...Nc4 2.Rxf5#,
1...Nf3 2.Nxd3#

K Theme: threat form of Lacey
a) 1. a6! (2.Red5#), 1...bxc5 2.Red5#,
1...bxc5 2.Qxd6#
1. g6! (2.Red5#), 1...bxc5 2.Qxd6#,
1...bxc5 2.Red5#
1. Threat: form of Lacey
a) 1. b8N! (2.d8N!), 1...Rxd7 2.Bd8N#,
1...Rxd7 2.Nf3#
b) 1.b8N! (2.Bd8N!), 1...Rxd7 2.Nb3#,
1...Rxd7 2.d8N#

MAFF, OWU, UPA, or other related conditions, may also be transferred to orthodox problems through modification of orthodox themes. To illustrate, the normal cycle: 1.A-B-C : 2.B-C-A, can be transformed to a cycle: 1.A-B-C : 2.B'-C'-A', where move X' is in a certain relation to move X. The identity, X' = X, is one of the many thinkable relationships, e.g. the move X' can be reallocated exactly one field around the move X (see figure I). Mr. Bedrich For- manek named this form the Quasi-Pseudo theme illustrated by diagrams M and N.

M Theme: Quasi-Pseudo threat form of Lacey
a) 1.Qe7! (2.Qe4# [A]), 1...Qxe2 2.Nxe2#
[b], 1...Re5 2.Qe4# [C]
2. Bd5! (2.c2# [B'], 1...Qxe2 2Nb3# [C']
1...Re5 2.Qxe2# [A']

N Theme: Quasi-Pseudo Ukraine
a) 1.Re4! (2.Re5#), 1...Bd6 2.Rxd6# [AB]
2. a8N! (2.Nc7#), 1...Bd6 2.Nb6# [BC]
3. Re4! (2.Re5#), 1...Bd6 2.Rd4# [CA]
History of new strategy

German Bruno Oswald Sommer did first known reciprocal change in 1921, unclear if intentional. 'Swap of mates' or other new strategic elements had occurred before, but authors were unaware of it or didn't invent higher forms (reciprocal, paradox...). Faulkner's reciprocal (1924) preceded Mari too, and could perhaps be intentional. Finally Mari's disciple Cristoffanini did 'reciprocal' before Mari in 1927. Anyhow, Mari was the father and leader of the 'new strategy'. Since the reciprocal shift, other new strategic themes have been appearing: combinations of shifts of mates, functions e.g. Dombrovskis's threat paradoxes 1958, Vladimirov's key paradoxes 1977.
'Swapped mates' preceded 'threat paradox' followed by 'key paradox', because a set of all possible threats (2nd move before black moves) or keys (1st move), is smaller than a set of mates (2nd move after black moves). So it is a bit statistically easier to change mates than threats, keys (change of keys are rarest with few ways to use key as a mate). Like the shortest path shows: combinations exponentially raises by linear number of elements N!/2: more moves, more options (=easier to do). But too many combinations have opposite effect. So 'new strategy' thrives in 2, 3 movers, then its potential declines. The table shows selected cycles, year of origin, numbers.

<table>
<thead>
<tr>
<th>Cycle of</th>
<th>Prototype</th>
<th>Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 mates</td>
<td>1949 Lačný</td>
<td>839</td>
</tr>
<tr>
<td>2 mates + 1 threat</td>
<td>1964 Shedey</td>
<td>405</td>
</tr>
<tr>
<td>2 mates + 1 key</td>
<td>1971 Kovalenko</td>
<td>237</td>
</tr>
</tbody>
</table>

source: Cyclone (Peter Gvozdják, 2000 / 2010)

To shift 2 mates, is easier than 3 or 4 mates. Like figure skater jumps easier 2 than 3, 4 pirouettes. Then it depends on a type (Axel, Lutz...), style, combinations, scenario. Physically less limited mental fields (art, science) offer more options than figure skating, gymnastic, etc. So it is harder to understand or classify. Except the most popular mate in 2, there are mate in 3, 4, 5..., studies, various stipulations exist too: self-mate, help-mate, fairy conditions... In general, more options (bigger set), easier to compose. More intricate mechanism (more shifts) with less material (smaller set), better problem is. The style counts too: intricate schematic logic can be worse than simple elegant one.
Prototype of 2 threat paradoxes (Dombrovskis)

Keywords:
- 2 threats giving key
- Dombrovskis

Prototype of 2 key paradoxes (Vladimirov)

Keywords:
- Vladimirov