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«LE COURAGE DES POSITIONS EXTRÊMES»: PALMA BUCARELLI E L'AVANGUARDIA ROMANA ALLA BIENNALE DI PARIGI DEL 1969

Abstract

The following is a tentative reconstruction of the Italian participation to the VI Paris Biennial of 1969, an event that has been practically ignored at the present state of studies. The exhibition is a crucial event for the European reception of young Italian art in general, with a particular attention toward the Roman scene. The presence of artists such as Sergio Lombardo, Maurizio Mochetti, Giulio Paolini and Jannis Kounellis is a testimony of the will of the curator, Palma Bucarelli, (who, at the time, was also director of the Galleria Nazionale d'Arte Moderna) to provide institutional support to the most experimental researches of the mid-Sixties' avant-garde.

Palma Bucarelli, fra museo e avanguardia

Palma Bucarelli (Roma, 1910-1998) è stata Direttrice della Galleria Nazionale d'Arte Moderna di Roma per ben 33 anni, dal 1942 al 1975, e fin dall'inizio della sua gestione ha tentato di elaborare un innovativo modello teorico per mettere in atto un processo di revisione del ruolo dell'istituzione museale, al fine di trasformarla nell'interlocutore privilegiato degli artisti, ponendosi sia come committente e promotore di temi di ricerca e di studio che come centro di cultura e informazione a livello estetico (Margozzi 2009; Cantatore, Zagra 2011).

Questo modello teorico non era chiuso in sé stesso ma, come chiariva la stessa Bucarelli in un articolo pubblicato nel 1967 su *Marcatré*, era aperto alle trasformazioni degli assetti sociali e culturali, in modo da rendere il museo un «attivo organismo di documentazione e di informazione» (Bu-

carelli 1967a). L'elaborazione di tale modello teorico, secondo Monica Donvito, «costituì un contributo fondamentale al processo di revisione del ruolo elitario dell'istituzione museale nell'ambito del dibattito sulla cultura di massa» (Donvito 2003).

Attraverso le mostre sull'avanguardia internazionale organizzate dalla Bucarelli alla Galleria Nazionale, i giovani artisti italiani ebbero la possibilità di conoscere opere fondamentali per il consolidarsi delle loro innovative sperimentazioni. E grazie anche all'assegnazione dei "premi d'incoraggiamento" istituiti dalla Direttrice, i giovani artisti riconobbero fin da subito nella Bucarelli un punto di riferimento istituzionale, e la loro attenzione venne prontamente ricambiata. Infatti, all'interno di questo strutturato lavoro di promozione culturale, nacquero una serie di mostre collettive di artisti italiani d'avanguardia organizzate dalla Galleria Nazionale, fin dalla metà degli anni Cinquanta, in diverse istituzioni museali straniere.

Grazie alla fondamentale collaborazione dell'Ispettore della Soprintendenza Giorgio de Marchis, e ai costanti consigli di Giulio Carlo Argan, questa attività di promozione degli artisti italiani all'estero subì un'accelerazione a partire dal 1965, con mostre itineranti (come *Aspetti dell'arte italiana contemporanea* e *Cento opere d'arte italiana dal futurismo a oggi*) organizzate dalla Galleria Nazionale e ospitate in importanti istituzioni museali di diversi paesi europei, anche al di là della cortina di ferro, come Francia, Germania, Polonia e Svezia (de Marchis 1966; de Marchis, Pinto 1968).

Fra questi eventi di promozione dell'arte italiana all'estero uno dei più interessanti è dato dalla doppia partecipazione alla Biennale di Parigi del 1967 e del 1969, con la sezione italiana curata, in entrambi i casi, dalla stessa Bucarelli, secondo una chiara volontà politico-culturale di riconoscimento istituzionale della giovane avanguardia italiana, e romana in particolare, a livello europeo.

L'Italia alla Biennale dei "giovani artisti" (1959-1967)

La Biennale di Parigi, fondata nel 1959 dall'allora Ministro della Cultura francese André Malraux, si presentava fin dall'inizio come una *Manifestation Biennale et Internationale des Jeunes Artistes*, ospitata al Musée d'Art Moderne de la Ville de Paris e organizzata secondo le modalità espositive tipiche della Biennale di Venezia, per cui ogni paese invitato curava la propria partecipazione scegliendo le diverse sezioni in cui presentare i

propri artisti (oltre alle arti plastiche, veniva data molta importanza anche al teatro e alla musica).

Fin dalla Prima edizione del 1959 la scelta degli artisti per la partecipazione italiana era stata operata da un comitato esecutivo diretto dal Segretario generale della Quadriennale di Roma, Fortunato Bellonzi, nominato commissario generale per l'Italia fino alla Quarta edizione del 1965, quando organizzò l'esposizione secondo un criterio di unità tematica in relazione a un progetto architettonico (una chiesa dedicata alla figura del Buon Ladrone), in cui s'inserivano le opere pittoriche e plastiche degli artisti visivi invitati, tutte di tema religioso (Bellonzi 1965).

Nel 1967 la partecipazione italiana alla Quinta edizione della Biennale viene affidata alla cura di Palma Bucarelli e cambia radicalmente direzione, anche se Bellonzi risulta comunque nel comitato organizzativo insieme a Gian Alberto Dell'Acqua, Filiberto Menna e Giorgio Vigni. La Bucarelli già nell'autunno del 1965 era stata nominata presidente del comitato d'iniziativa per la riforma dei grandi enti espositivi italiani, fra cui la stessa Quadriennale di Roma, e basta scorrere i nomi degli artisti partecipanti alla sezione "Pittura e Scultura" della Biennale di Parigi del 1967 per capire come il lavoro di selezione fosse aggiornato rispetto alle sperimentazioni più attuali dell'arte italiana, con una particolare attenzione a quelle cinetico-programmate. Erano, infatti, presenti Carlo Alfano, Agostino Bonalumi, Davide Boriani, Nicola Carrino, Mario Ceroli, Gianni Colombo, Tano Festa, Marcolino Gandini, Paolo Icaro, Ettore Innocente, Jannis Kounellis, Enzo Mari, Manfredo Massironi, Eliseo Mattiacci, Pino Pascali, Giuseppe Perucchini, Lucio Del Pezzo, Michelangelo Pistoletto, Giovanni Pizzo, Pasquale Santoro, Paolo Scheggi e Mario Schifano. Nella sezione "Grafica" erano, invece, presenti Alberto Biasi ed Edoardo Landi, Paolo Carosone e Luca Patella. Significativi anche i nomi dei collaboratori organizzativi delle sezioni speciali: Manfredo Tafuri per "Architettura", Giuseppe Bartolucci per "Scenografia", Alberto Boatto per "Film e Fotografia", Mario Bortolotto per "Musica" e Lara-Vinca Masini per il "Travail d'Equipe" *Spazio cinetico-sonoro* realizzato dal Gruppo Centro Proposte di Firenze (Moulin 1967, Bucarelli 1967b).

Già solo scorrendo questo elenco di nomi risulta chiaro come in questa Quinta edizione della Biennale di Parigi l'intenzione della Bucarelli fosse quella di costruire una sorta di mostra antologica sulle diverse ricerche dell'avanguardia italiana dei primi anni Sessanta, presentando artisti che,

seppur giovani, avevano per la maggior parte già raggiunto un riconoscimento internazionale. Dopo la fine della Biennale una selezione delle opere esposte a Parigi furono anche presentate nella mostra *Opere di giovani artisti romani*, aperta nel dicembre 1967 alla Galleria Nazionale di Roma, quasi a dare continuità alle dichiarazioni d'intenti del già citato articolo *Il museo e la comunicazione di massa*, pubblicato dalla Direttrice in quegli stessi giorni.

Sergio Lombardo e Maurizio Mochetti alla Biennale del 1969

Diversamente dalla precedente, per la Sesta edizione della Biennale parigina (2 ottobre – 2 novembre 1969) la mostra italiana si presenta molto più concentrata e per le sezioni “Pittura” e “Scultura”, separate in quell’anno, la Bucarelli chiama solo due artisti: Maurizio Mochetti (Roma, 1940) per la prima e Sergio Lombardo (Roma, 1939) per la seconda. Non si tratta propriamente né di un pittore né di uno scultore, ma la Bucarelli li seleziona appositamente, essendo a conoscenza delle ricerche di entrambi fin dai loro esordi.

Lombardo era già stato invitato a esporre in entrambe le mostre itineranti organizzate dalla Galleria Nazionale citate in precedenza (*Aspetti dell’arte italiana contemporanea* e *Cento opere d’arte italiana dal futurismo a oggi*); mentre Mochetti nel luglio dello stesso 1969 aveva vinto la prima edizione del “Premio Pino Pascali”, iniziativa nata per volere della Bucarelli dopo la prematura scomparsa dell’artista pugliese e nella cui giuria figuravano anche de Marchis e Marisa Volpi Orlandini (AA. VV. 1969). Proprio quest’ultima aveva avuto, in quegli anni, un ruolo fondamentale per la valorizzazione delle ricerche sperimentali di Lombardo e Mochetti, presentando il loro lavoro sia in mostre personali che in due importanti collettive organizzate a Roma nei mesi precedenti alla Biennale di Parigi: *Analisi mentale dell’esperienza visiva*, Galleria La Salita (Volpi Orlandini 1968a) e *I materiali*, Qui Arte Contemporanea (Volpi Orlandini 1969).

A Parigi Mochetti presenta una serie di opere “ambientali” che prevedevano l’utilizzo del movimento, del suono e della luce come marcatori spaziali spiazzanti per lo spettatore: *Generatrice* (1967-68), *Asse oscillante* (1968) e *0 X 0* (1969). Tra i progetti che l’artista aveva già presentato nella sua prima mostra personale a La Salita nel novembre 1968, introdotta da un testo proprio della Volpi (Volpi Orlandini 1968b), troviamo anche

Generatrice, che compare sulla copertina del catalogo (fig. 1) e sarà poi riallestita a Parigi: un asse di alluminio, in lento movimento per mezzo di un micromotore interno, “genera” un cono virtuale per poi tornare indietro “annullandolo”. *Asse oscillante* unisce al movimento anche il suono, con l’inserimento di una piccola sfera di acciaio all’interno di un tubo di alluminio in oscillazione, mentre in *0 X 0* la protagonista è la luce: un punto di luce si estende su una parete fino a diventare una linea che la percorre in tutta la sua lunghezza, per poi tornare indietro al punto iniziale.

Fin da queste sue prime ricerche Mochetti, come afferma Germano Celant, si distingue dalla condizione statica della pittura e della scultura a lui contemporanea dedicando la sua attenzione «a un universo in continuo movimento, dove gli elementi sono impercettibili e fluidi. Ma non indirizza il suo interesse alla loro immaterialità, che lo porterebbe inevitabilmente verso una dimensione concettuale, rimane piuttosto ancorato alla fisicità. [...] Una diversa interpretazione della fisicità, che legge l’interiorità e non l’esteriorità dell’energia, con le sue infinite variazioni, facilmente riconoscibili e gestibili entro i limiti delle sue polarità» (Celant 2003).

Lombardo a Parigi espone due opere in plastica e legno laminato riconducibili alla serie dei cosiddetti “Supercomponibili” (nove Punti Extra – diametro 50 cm – del 1967; *127 Cubi* – ognuno di 18 cm di lato – del 1968) insieme a una *Sfera con sirena* (1969), sfera del diametro di 104 cm in resina poliestere e fibra di vetro che, se spostata dalla sua posizione iniziale, produceva un suono assordante grazie a una sirena alimentata a batteria posizionata al suo interno. Entrambe queste serie di lavori erano già state presentate in due mostre personali sempre a La Salita di Roma: *Super-componibili* (marzo 1968) e *Sfera con sirena* (maggio 1969, fig. 2). La produzione di “Supercomponibili” e “Sfere” riguarda un arco di tempo molto ristretto (1965-1970) se confrontato alla lunga carriera di Lombardo, eppure queste opere rivestono un ruolo fondamentale nell’aprirsi “oltre il quadro” della ricerca dell’artista perché, come spiega Anna Homberg: «la dialettica tra spazio dell’esperienza e spazio contemplativo non è più affidata al solo contorno bensì alla disposizione spaziale degli elementi progettati in serie» (Homberg 1990). Con queste opere, allestibili liberamente e quindi “componibili” in infinite maniere sia a parete (Punti Extra) che a terra (*127 Cubi*), Lombardo si distacca totalmente dalla pratica pittorica che lo aveva contraddistinto all’interno della cosiddetta Scuola di Piazza del Popolo per intraprendere un percorso di ricerca concettuale. A partire

dalle “Sfere”, in tutte le sue realizzazioni degli anni Settanta il coinvolgimento diretto dello spettatore sarà fondamentale, fino a diventare uno dei cardini da cui si svilupperà la sua Teoria eventualista (Lombardo 1987). C’è, infine, da notare un altro aspetto rispetto alla scelte parigine della Bucarelli: anche nel 1969 la Direttrice conferma quella particolare attenzione al contesto romano già intravista nel 1967, e non solo per l’invito a Mochetti e Lombardo. Di tutti gli artisti invitati nelle altre sezioni della Biennale, la metà sono romani: sono presenti Claudio Abate per la “Fotografia”, Walter Branchi per la “Composizione Musicale”, Alberto Grifi, Marcello Grottesi e Paolo Matteucci per i “Films”. A questi va aggiunta la scultrice Clotilde Ricciardi che, con il musicista Cesare Reghetti, partecipa a un “Travail d’Equipe” intitolato *Anticamera*, realizzato insieme all’architetto Egidio De Grossi e al designer Oscar Manelli.

Le scelte coraggiose non passano inosservate

Radicalizzando il lavoro già iniziato nell’edizione precedente, la scelta degli artisti per la Biennale di Parigi del 1969 dimostra quel «courage des positions extrêmes» di cui la stessa Bucarelli parla nel testo di presentazione alla sezione italiana presente nel catalogo generale della manifestazione (Moulin 1969, fig. 3). È importante, da questo punto di vista, sottolineare la presenza, accanto a Mochetti e Lombardo, di altri due significativi artisti d’avanguardia, come Giulio Paolini (Genova, 1940) e il romano d’adozione Jannis Kounellis (Pireo, 1936 – Roma, 2017). Paolini, invitato per la “Grafica”, espone anch’egli un’opera che, pur realizzata a matita, assume caratteristiche ambientali (*Vedo o La decifrazione del mio campo visivo*, 1969). Kounellis presenta, invece, la “Scenografia” realizzata per lo spettacolo *I testimoni* (regia di Carlo Quartucci, da tre testi dell’autore polacco Tadeusz Różewicz) andato in scena per la prima volta al Teatro Gobetti di Torino nel novembre 1968.

Chiamando a esporre questi artisti, la Bucarelli vuole dare spazio a quelle ricerche che tentavano un superamento della pittura e della scultura tradizionali, attraverso opere che, con diversi materiali e modalità operative, puntavano a indagare la terza dimensione.

A questo proposito non va dimenticato che già l’anno prima Lombardo, insieme anche a Kounellis e Paolini, era stato invitato a partecipare a *Nuovo Paesaggio*, progetto di mostra diffusa ideato dagli artisti Gino Marotta ed Enrico Castellani. Fissata per il giugno 1968 nell’ambito della Triennale,

la mostra fu annullata per l'occupazione della rassegna milanese, ma sappiamo che prevedeva 35 interventi ambientali in grande scala di altrettanti artisti italiani da allestire in diversi luoghi all'aperto dell'intera penisola. L'intenzione era quella di aprire l'opera al contesto urbano, prospettando nuovi rapporti tra il mondo delle arti figurative e l'architettura, senza cercare un legame scenografico attraverso la realizzazione di monumenti, bensì di "nuove esperienze" in scala con lo spazio fisico in cui venivano inserite (Acocella 2016).

Il coraggio dimostrato sia dalle ricerche degli artisti invitati a Parigi che dalla curatrice che li aveva selezionati, non passò inosservato, come testimoniano due "confronti diretti" con l'organizzazione francese che videro protagonisti proprio Mochetti e Lombardo.

Mochetti riceve a sorpresa il Primo Premio per la Pittura, pur avendo presentato opere ambientali che, come abbiamo visto, di pittorico avevano poco o nulla. Nei giorni precedenti all'inaugurazione c'erano, però, stati diversi problemi d'installazione che avevano esasperato l'artista, come testimonia una scritta a pennarello (in inglese e in tedesco) sulla quarta di copertina della sua copia del catalogo della Biennale, evidentemente usata come cartello improvvisato per avvisare gli spettatori della cattiva gestione dell'allestimento (fig. 4). La scelta del premio a Mochetti, voluto dal curatore generale Jacques Lassaigue, risulta singolare anche agli occhi di Tullio Catalano, che sulla rivista *Gala* scrive: «Il premio conferito sembra piuttosto l'omaggio di chi deforma un problema estetico per ridurlo a fatto commerciale, cercando la solidarietà di chi sta progressivamente svuotando, come Mochetti, le matrici originali del proprio lavoro, imbastito e tessuto in un clima isolato e d'avanguardia di una particolare situazione romana non ufficiale e non strombazzata ai quattro venti, che vede la conferma di una decaduta e scaduta analisi di una ricerca autenticamente artistica, e la sua corrispettiva sostituzione con il canto del cigno dell'annesso apparato critico, in senso lato, che ne fuorvia il senso e ne schematizza, istituendone la sua decodificazione a priori, la pur teoricamente irriducibile evoluzione» (Catalano 1970).

La decisione di premiare Mochetti risulta ancora più straniante se si pensa che Lombardo viene duramente attaccato proprio da Lassaigue per la sua *Sfera con sirena*, il cui suono assordante si confondeva con quello dell'allarme del museo, creando disordine nei visitatori. Gli organizzatori minacciarono di non esporre l'opera e si potrebbe ipotizzare che, visto

l'utilizzo del participio passato "heard" (da "to hear": sentire, ascoltare, udire), la scritta sulla quarta di copertina del catalogo di Mochetti (fig. 4) si riferisca addirittura a questa opera di Lombardo. Purtroppo le testimonianze di entrambi artisti non chiariscono l'accaduto. In ogni caso, come riferisce ancora Catalano, «gli italiani, come due anni prima Kounellis con il suo saldatore alla fiamma ossidrica che fu sabotato e non fatto funzionare, sembrano non passarla liscia con la mentalità reazionaria dei depositari della Cultura e degli investiti da incarichi ministeriali» (Catalano 1970). Solo il deciso intervento della Bucarelli sistemò le cose, come racconta lei stessa in una dichiarazione riportata in un articolo pubblicato su "Il Mattino" del 5 ottobre 1969 a firma M. M.: «Il torto è il loro. Il fatto è che non si può organizzare una mostra di giovani con i criteri antichi. Il museo tradizionale è del tutto superato: occorrono nuovi ambienti, nuove forme. [...] Per organizzare bene una manifestazione del genere bisogna essere spregiudicati» (Bucarelli, riportata in M. M. 1969).

Nonostante lo sforzo, diverse critiche negative apparvero sulla stampa italiana dell'epoca, come quella assai schernente di Bruno Romani sulle pagine de "Il Messaggero" (Romani 1969). Il commento più positivo sulla partecipazione italiana, accanto a quello già citato di Catalano, venne paradossalmente da un critico francese, Otto Hahn (Hahn 1969). Andando, comunque, al di là delle critiche e continuando nella sua ricerca, Lombardo sarà ancora più "spregiudicato" nel presentare non una ma ben sette *Sfere con Sirena* nella sua sala personale del Padiglione Italia alla Biennale di Venezia dell'anno successivo, a cui parteciperanno anche Mochetti e Paolini, insieme a Carlo Battaglia, Agostino Bonalumi, Nicola Carrino e Claudio Verna: tutti chiamati a esporre dal commissario Gillo Dorfles, coadiuvato fra gli altri dal sempre presente de Marchis (AA. VV. 1970).

Cambio di paradigma

Eppure, queste scelte coraggiose da lì a pochi anni saranno accantonate dalle istituzioni culturali italiane, quasi a voler disinnescare la ricerca artistica più radicale per arrivare a quel "naufragio dell'avanguardia" di cui parla de Marchis già nel 1974 (de Marchis 1974). Questo "cambio di paradigma", per dirla con il linguaggio scientifico di Lombardo, si concretizzerà tra la metà degli anni Settanta e l'inizio degli anni Ottanta, portando molti artisti italiani a svuotarsi delle teorie d'avanguardia per provare a rimanere all'interno del mercato delle grandi distribuzioni internazionali,

con ricerche giudicabili esclusivamente attraverso le leggi dell'economia di mercato: «L'impostazione storicista europea fu *decostruita* in favore dell'*anything goes* postmoderno» (Lombardo 2013).

Pochi anni dopo il suo riconoscimento internazionale degli anni Sessanta, l'avanguardia italiana, e quella romana in particolare, sarà costretta a sopravvivere in piccole realtà di sperimentazione che godranno sempre meno dell'appoggio istituzionale per poter essere conosciute e valorizzate, come, invece, era avvenuto grazie al lavoro di personalità forti, capaci di difendere le proprie scelte coraggiose. Su tutte Palma Bucarelli, per la quale le ricerche d'avanguardia dei giovani artisti italiani costituivano un fondamentale elemento di rinnovamento culturale spendibile anche e soprattutto all'estero, vista la capacità di entrare in relazione e reggere il confronto da pari a pari con la coeva produzione artistica internazionale.

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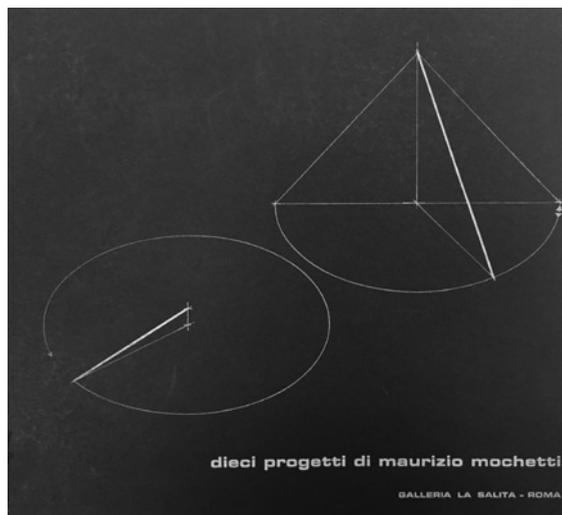


Fig. 1: copertina del catalogo della mostra personale di Mochetti alla Galleria La Salita (1968)



Fig. 2: invito della mostra personale di Lombardo alla Galleria La Salita (1969)



Fig. 3: copertina del catalogo della VI Biennale di Parigi (1969)

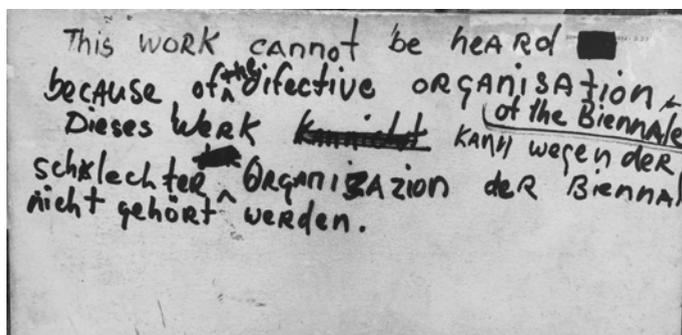


Fig. 4: quarta di copertina del catalogo conservato nell'Archivio Mochetti (1969)

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MINIMAL COMPLETE COMPACT TOROIDAL QUILTING COMPOSITIONS WITH ONLY 2 STOCHASTIC TILES

Abstract

A second level of Completeness refers to how many different combined-shapes can come out with n different tiles. I tried to discover if a quilting composition combined with only 2 different tiles (one body-tile and one limb-tile), in such a way as to generate the all possible 32 different combined shapes with no repetition (second level of completeness), could be possible. Results were shown and proved. A new set of 50 tiles and new minimal complete and compact quilting compositions with only 2 tiles were created.

Previous investigations on stochastic compositions aiming at peculiar aesthetical properties like minimality, completeness, compactness and toroidality (MCCT) and peculiar geometrical properties (all the 4 sides of each body-tile must confine only with limb-tiles) led to discover new compositions that were named QUILTING.

Compactness requires quilting to be a rectangle. Toroidality means that right side is the continuation of left side and top side is the continuation of bottom side. Minimality requires no combined-shape to be repeated. The first level of Completeness is related to the joining of tiles, it refers to the number of the different combinations that can be done out of the 4 sides of n different tiles. A second level of Completeness refers to how many different combined-shapes can be done with n different tiles.

Actually for instance the 4T quilting compositions in Tab. 2 (1, 2), pages

7 and 8 (Lombardo 2018), if fulfilled with 2 different B type (limbs) and 2 different C type (bodies) can generate 64 different combined shapes, while in Tab. 2 there are only 32. The first level of completeness is 32, the second level is 64.

I tried to discover if a MCCT quilting composition could be done with only 2 different tiles (one body-tile and one limb-tile), in such a way as to generate the all possible 32 different combined shapes with no repetition (second level of completeness), 2 results are shown in TAB. 1 and TAB 3.

To demonstrate the completeness and the minimality see TAB.2.

The numbers in bold types (1, 2) on the center of the cells indicate if the tile-shape is a body (1), or a limb (2). In quilting compositions bodies and limbs are alternated both in columns and rows, like in a chessboard. On the center of the cells there are capital letters in bold type (A, B, C, D) indicating the 4 possible rotations of the tiles. The tiles C type have 2 bodies, the small letters (a, b) represent the cutting-edges of the first body and the small letters (c, d) represent the cutting-edges of the second body. The tiles B type have 4 limbs, the small numbers represent the 4 limbs (1, 2, 3, 4) of the tiles C type. Each body (a, b) or (c, d) must join with 2 limbs, thus there are 16 possible dispositions for the body (a, b) and 16 possible connections for the body (c, d), in all 32 different combined shapes.

Being minimal the composition must have no repetition, being complete it must generate all the 32 possible combined shapes: 16 for the body (a, b) and 16 for the body (b, c). The body (a, b) joins with the limbs: 2,3/1,2/4, 1/3,4/3,2/2,1/1,4/4,3/1,1/4,4/3,3/2,2/2,4/1,3/4,2/3,1. The body (c, d) joins with the limbs: 3,1/2,4/1,3/4,2/2,2/1,1/4,4/3,3/4,3/3,2/2,1/1,4/3,4/2,3/1,2/4,1. There are no repetitions and all 32 combined-shapes are represented. QED.

TAB. 1

2T MCCT QUILTING COMPOSITION 2019 N. 1							
1D	2B	1D	2C	1D	2D	1D	2A
2A	1B	2B	1B	2C	1B	2D	1B
1B	2D	1B	2A	1B	2B	1B	2C
2A	1D	2B	1D	2C	1D	2D	1D

TAB. 2

2T MCCT QUILTING COMPOSITION 2019 N.1							
b a 1D c d	4 3 2B 1 2	b a 1D c d	3 2 2C 4 1	b a 1D c d	2 1 2D 3 4	b a 1D c d	1 4 2A 2 3
1 4 2A 2 3	d c 1B a b	4 3 2B 1 2	d c 1B a b	3 2 2C 4 1	d c 1B a b	2 1 2D 3 4	d c 1B a b
d c 1B a b	2 1 2D 3 4	d c 1B a b	1 4 2A 2 3	d c 1B a b	4 3 2B 1 2	d c 1B a b	3 2 2C 4 1
1 4 2A 2 3	b a 1D c d	4 3 2B 1 2	b a 1D c d	3 2 2C 4 1	b a 1D c d	2 1 2D 3 4	b a 1D c d

TAB. 3

2T MCCT QUILTING COMPOSITION 2019 N. 2							
1A	2A	1A	2A	1A	2A	1A	2A
2A	1B	2D	1B	2C	1B	2B	1B
1A	2C	1A	2C	1A	2C	1A	2C
2C	1D	2B	1D	2A	1D	2D	1D

TAB 4

2T MCCT QUILTING COMPOSITION 2019 N. 2							
a d 1A b c	1 4 2A 2 3	a d 1A b c	1 4 2A 2 3	a d 1A b c	1 4 2A 2 3	a d 1A b c	1 4 2A 2 3
1 4 2A 2 3	d c 1B a b	2 1 2D 3 4	d c 1B a b	3 2 2C 4 1	d c 1B a b	4 3 2B 1 2	d c 1B a b
a d 1A b c	3 2 2C 4 1	a d 1A b c	3 2 2C 4 1	a d 1A b c	3 2 2C 4 1	a d 1A b c	3 2 2C 4 1
3 2 2C 4 1	b a 1D c d	4 3 2B 1 2	b a 1D c d	1 4 2A 2 3	b a 1D c d	2 1 2D 3 4	b a 1D c d

Similar demonstration for the second solution of the problem is shown in TAB.4. Body (a, b) joins with limbs: 1,4 2,4 3,4 4,4 1,3 2,3 3,3 4,3 3,2 4,2 1,2 2,2 4,1 1,1 2,1 3,1. Body (b, c) joins with limbs: 1,2 2,2 3,2 4,2 2,3 3,3 4,3 1,3 3,4 4,4 1,4 2,4 3,1 4,1 1,1 2,1. All 32 possible combined shapes appear with no repetitions. QED.

A new set of 50 tiles were created: 10 C5M RANDOM 19, 10 C10M RANDOM 19, 20 B30M RANDOM 19 and 10 B20M Random 19 as shown in Fig. 1. New MCCT quilting compositions were created as well, 6 of which are shown in Figg. 2, 3, 4, 5, 6, 7.

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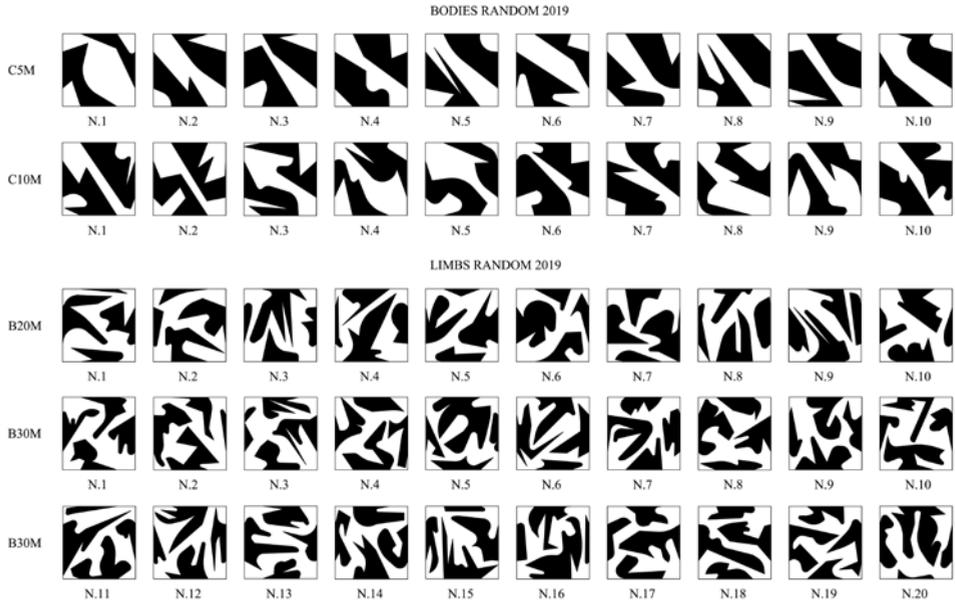


Fig. 1

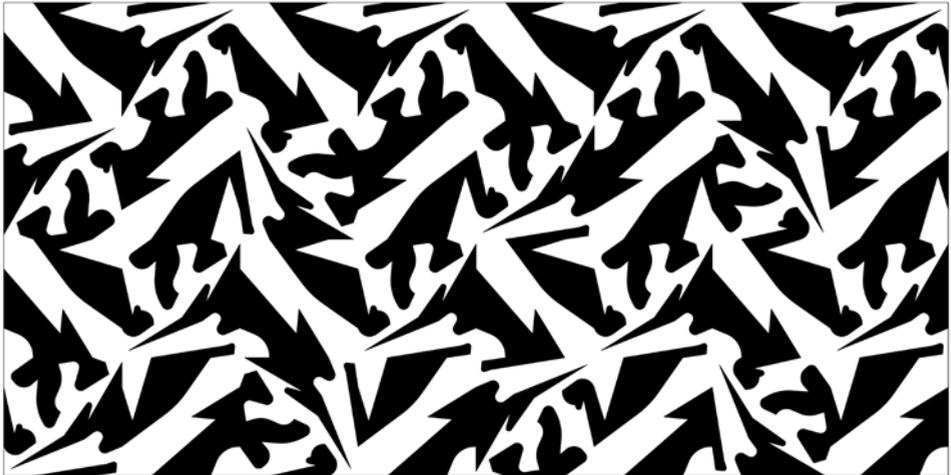


Fig. 2: 2T MCCT quilting compositions N.2 (C5M random 19 N.2, C30M random 19 N.11) 2019



Fig. 3: 2T MCCT quilting compositions N.2 (C5M random 19 N.3, B30M random 19 N.19) 2019



Fig. 4: 2T MCCT quilting compositions N.2 (C10M random 19 N.4, B30M random 19 N.10) 2019

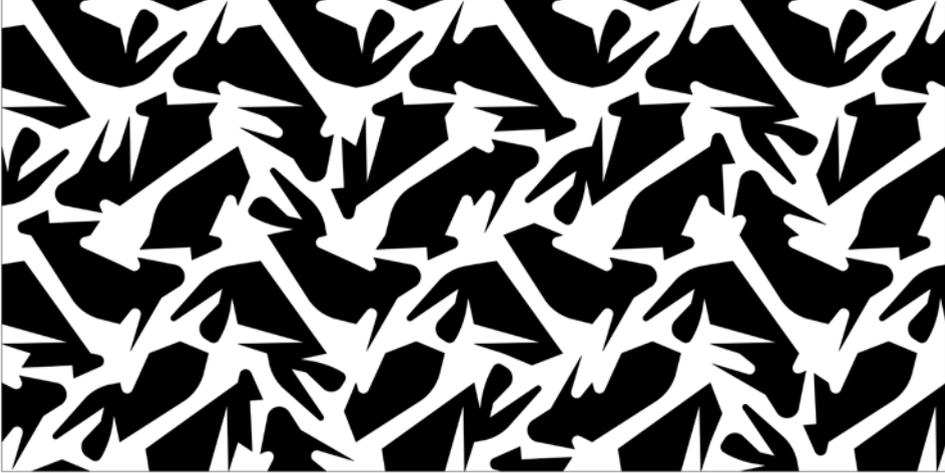


Fig. 5: 2T MCCT quilting compositions N.2 (C5M random 19 N.9, B20M 19 N.5) 2019



Fig. 6: 2T MCCT quilting compositions N.2 (C5M random 19 N.5, B30M random 19 N.1) 2019



Fig. 7: 2T MCCT quilting compositions N.2 (C5M random 19 N.9, B30M random 19 N.20) 2019

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DRAGONFLY EYES. SOME THEORETICAL CONSIDERATIONS

Abstract

Dragonfly Eyes is a movie made by chinese contemporary artist Xu Bing, that refers to the issue of urban control of the citizen, to the social control of the worker and the psychological control of the individual. This artwork was analyzed from the point of view of the Avant-garde theories, from Futurism to Eventualism, during a lecture that was held at Today Art Museum in Beijing, on September 24th 2019.

I am honoured to be here, with people I have known for a long time, and with whom we are increasingly consolidating a relationship of intellectual esteem and deep friendship. Thanks to the Director of the Today Art Museum Alex Gao Peng for hosting this lecture, and thanks to Xu Bing for opening up to a theoretical analysis of his work. I greet also Franco Amadei, Director of IIC in Beijing and promoter of the conference and of the book “L’arte che anticipa il futuro. Teorie e opere dell’Avanguardia italiana, dal Futurismo all’Eventualismo” (Istituto Italiano di Cultura di Pechino, 20 Luglio 2017). Curiously, in the book I am now presenting, all of today’s guests – prof. Hsingyuan Tsao, Artist Xu Bing and Director Alex Gao Peng – have given their kind contribution (Mirolla, Tsao, 2019). In this volume, the 7 principles of Eventualism were published in mandarin for the first time. Assuming Eventualism as my theoretical frame of reference, in this lecture I will try to place the artwork of Xu Bing within the evolutionary aesthetic research of the European Avant-gardes, the so-called Historical

Avant-gardes, in the line that goes from Futurism to Eventualism.

In January 2018 I was honoured to visit Xu Bing studio in Beijing. It was Prof. Tsao, one of the greatest experts in Xu Bing aesthetics, to introduce me to him. Prof. Tsao told me that, more than his works, we would have watched his latest movie, *Dragonfly Eyes*, a rather unusual film/documentary, difficult to define in its genre, mainly because of its encroachment into the cinematographic sphere, but still aiming to be considered as a work of art. Being a kind of a borderline critical operation, I was very interested in it, as it stood on the edge of the differentiation of artistic genres and languages, and had all the flavor of an experiment.

So, after talking friendly for a long time and having the privilege of discussing together his artworks *Book from the Sky* (1987-1991), *Background Story* (2004-2014) and *Four Poems of W.B. Yeates* (2008), we sat comfortably on the sofa and the screening begun.

I remember the first sequence of *Dragonfly Eyes* very well: an elegant girl is walking on a cold winter night in a luxurious deserted apartment block, glued with her eyes to her phone. She is so absorbed not to notice that there is a pool along the trajectory. The girl falls into the water and inexorably drowns, in total solitude. I remember asking myself right away, why did Xu Bing choose such a strong incipit, both tragic (transforming the innocent viewer in an eyewitness of an accidental death) and cynical (if we consider that the environmental technology is designed to certify the reality in its apparent neutrality).

The entire film is composed of indoor and outdoor surveillance footage, webcam footage, and a few bits of dashcam footage, taken from online video sharing websites. The source of the footage is key, because although as early as the 2000s Xu Bing had wanted to make a film that had “no actors and no cinematographer,” using found footage, it was only after 2010 that there was enough footage online for this project to be feasible.

Certainly, *Dragonfly Eyes* refers to the issue of urban control of the citizen, to the social control of the worker and the psychological control of the individual. I immediately thought of the famous novel by George Orwell, *1984*, which is probably one of the main sources for this work by Xu Bing. But in this occasion, more than referring to the epistemology of surveillance, I would rather address the attention on the phenomenology of the viewer, on which I believe Xu Bing is focused. What kind of viewer are we talking about? I deeply agree with the analytical approach of Xu Bing

submitting this work to a specialized audience. Indeed, the critical analysis becomes a real investigation method when the artistic community (art critics, historians, philosophers, aestheticians, filmmakers) is called to share different interpretations of a same work. Activating a theoretical dialogue between the artist and the experts can be considered a quite innovative method. I wonder if it could affect the subsequent research of the artist himself. I think so.

The attention to the viewer and to his psychological reactions activated by the perception of a work of art, precisely begun with Futurism. Futurism was the first aesthetic movement *to put the observer at the center of a painting* (Boccioni, 1914). Starting from Futurism, a progressive reinforcement of the observer's role took place, from a passive role to an active one. Just think of the *Futuristic Evenings*, first prototype of an *emergency situation* in which the observer has no escape; he is called to act, to react, to take aesthetic, ethical, environmental decisions, practically forced to a deep interaction with the artwork, to guarantee his own survival. Few decades later, in 1970, Italian artist and psychologist Sergio Lombardo presented the *Sphere with Sirene* at the Venice International Biennial, as an example of *emergency situation* directly related to the interaction theory of Futurism (Lombardo, Mirolla, 1995). Interaction is indeed one of the basic principles in the Eventualist theory: "If the reaction of the public is non-uniform, expressive, spontaneous and aesthetically valuable, an eventualist interaction has happened" (Lombardo, 2003).

Reading *Dragonfly Eyes* from an eventualist point of view, my questions are the following: how does the public react while watching it? Is there any questionnaire available for them to describe their thoughts or emotions? Is it possible to record, archive, compare all the different emotional reactions and interpretations of the public? Is it possible to measure the physiological variations in the perception of each observer during the screening of the movie? I am thinking mainly of the alteration of heart rhythms, and the activation of different cognitive areas of the brain, which today are normally the subject of study of neuroscience in various scientific experiments.

When approaching the Avant-garde perspective in art, we have to consider that a few extraordinary inventions were structurally meeting and partially merging with Futurism at the beginning of the 20th century, such as the Freudian Psychoanalysis and the Gestalt Theory of Max Wertheimer,

Koehler and Koffka. In discovering the unconscious, Sigmund Freud gave to the patient's flow of consciousness a substantial value of dynamic self-portrait. In the same years, perception psychologists began to measure individual responses to perceptual phenomena. And after Wertheimer discovered the PHI Phenomenon, he was able to explain the fundamental structure of film perception, in which the rapid juxtaposition of two static images creates an illusion of movement in the viewer's mind (Wertheimer, 1913). A few years later a new scientific discovery, the *Kuleshov Effect* (Kuleshov, Pudovkin, 1921) took place. In the *Kuleshov effect* the perception of two consecutive images allows different attributions, due to projective effects of internal psychological contents, which can considerably vary from person to person. Now, *Dragonfly Eyes* is culled through approximately 10,000 hours of surveillance videos. Can you imagine how many different interpretations could we discover if only asking the viewer to verbalize them?

Thanks to the Eventualist research, the observer is playing an increasing role in the aesthetic system. As suggested in the Eventualist concept of *abstinency of expression*: "The artist must avoid to express himself and his personal opinion or emotions. He must provoke the spontaneous and involuntary expression of the public with their different and conflictual interpretations" (Lombardo, 2003).

More radically than ever, the eventualist artist must avoid practicing his expressiveness, in order to bring out the expressiveness of the observer. As a consequence of this very radical principle, the artwork progressively loses its relevance, the materiality of the artwork loses its value, and the artisan skills lose importance, while the public's expressiveness earns position. From this point of view, *Dragonfly Eyes* is not the result of the expression of the artist, but it is the product of a hyper global video-collage. In the Eventualist theory the public's expressivity must be evaluated and measured, therefore an evocative spectrum is requested: if the reactions of the public are very different one from each other, then it means that an interaction was held. We speak about divergent/convergent evocative spectrum, where the greater conflictuality of the answers corresponds to an increase in the beauty of the work of art.

I think it would be interesting to obtain an evocative spectrum of *Dragonfly Eyes*, since Xu Bing's movie is able to trigger different emotional reactions in the observer: fear, feeling of danger, surprise, sense of catas-

trophe and the sensation of being immersed in a continuous emergency situation. How does each of us react in such emergency situations? Certainly through a series of reactions that we define as *highly creative and spontaneous*. Spontaneity, and evoding simulation of spontaneity, is the hardest goal in contemporary art. And this concept is one of the main principles of Eventualism: "To make evident the expression of the public, the stimulus must elicit spontaneity in the public. Pretending spontaneity must be evoded. Undesired errors, breaking a record, dreaming, scientific inventions, non-feigning reactions are examples of spontaneity" (Lombardo, 2003).

While in Futurism and Eventualism the viewer is really involved and immersed, in Xu Bing's movie the viewer always remains outside the real experience of danger and catastrophe. Emotional involvement, however, occurs at the level of mirror neurons, embodied simulation, in terms for us to share the experience of the other on a mental basis, but also on a physiological one.

From the structural point of view of the artistic process, *Dragonfly Eyes* is essentially a video-collage, a macro oject-trouve, a ready-made of found footage, well responding to a simple constructing method: to collect all the available footage in internet and to transform that material into a new discourse, a new structure. Eventualism calls it *structurality*: "In constructing the stimulus the artist must work as a scientist, he has to declare in advance his method as to be able to repeat and better the experiment. Structurality is opposite to arbitrary, handicraft, or even inspired creation" (Lombardo, 2003).

Therefore, we are going to face a basic difference. In *Dragonfly Eyes*, in fact, Xu Bing restores an element of authorial expressiveness: he prefers to build a sort of neoromantic plot on the whole video-collage, creating the fiction of a love story. Why does Xu Bing take a step that we can consider *regressive*, if seen in the line of the Avant-garde? Why to turn back to influence again the spectator's experience with the old authorial expressiveness?

I would like to recall the terrorist attacks of 9/11, to which we all participated as passive receivers. That historical event has formed and weaned us on the subject of truth/falsification, image/narration, revealing the manipulating effects of mass-media society, and the interferences - always possible - in every perceptive act. As Jean Baudrillard says, the symbolic

power of the attack on the Twin Towers has been amplified by the desperation aroused by the submission of the observer to an integral technology (Baudrillard, 2003).

Using the found footage, Xu Bing set up a cold process, an unexpressive one, in line with the radical scientific nature of the Avant-garde. However, restoring the authorial narrative through an expressive hyper-structured plot, he provided the viewer with a soft path, a perspective of salvation and humanitarian redemption, a survival response, an anchor against the total alienation and existential nihilism.

My conclusion is that the narcissistic wound both of the artist and the spectator is still taking action in almost every artistic process and production of our time. We should ask ourselves, instead, about the role of that archaic expressionist matrix that still strongly holds back the art in the definitive leap towards science.

The principle of *abstinency of expression* shows us a way, a radical horizon.

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Fig. 1: Dragonfly Eyes, still da film, 2017, 81', copyright Xu Bing

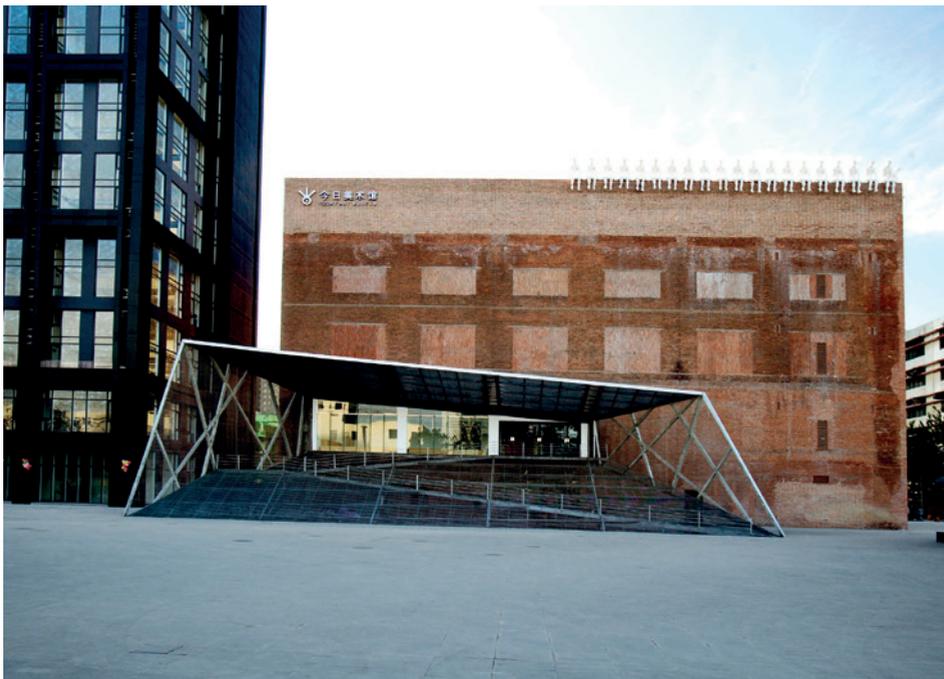


Fig. 2: Today Art Museum, Beijing



Fig. 3: Alex Gao Peng, Miriam Mirolla, Hsingyuan Tsao, Xu Bing, Today Art Museum, 24 Settembre 2019.

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DYNAMICS OF SOCIAL AND CULTURAL SYSTEMS: ARCHETYPICAL, – THOUGH RATHER PRELIMINARY, HALF-HYPOTHETICAL APPROACH

Abstract

The best way to realize one of fundamental evolutionary regularities – divergent development of any multi-element system, – should use its splitting based on the elements' features: 'binary oppositions,' among which the most pronounced are: the contraposition of left- or right-hemispheric dominance, as well as 'weak' or 'strong' types of the subject's nervous system. Combinations of five such latent variables form 'archetypes' (which have been known previously, though in the frameworks of other paradigms). Turning to dynamics of collective processes, we see alternation of structures which are invariant over different national cultures and epochs, as well as principal difference between unique, outstanding phenomena – and mass ones. Besides, certain 'personages' (roles) remain unchanged, only slightly varying their appearance. This phenomenon is illustrated with various kinds of empirical material, mainly Russian and Italian. The phenomenon of 'archetypic invariance' may be used in forecasting the future of culture, as well as in the practice of cultural politics.

Keywords: psychology, systemic-information approach, hemisphericity, neural typology, evolution, divergence, binary oppositions, archetypes, social roles, creativity, poetry, painting, cultural politics, national mentality, artistic directions, futurism.

Disappeared generation of 1820's: young men with jumping gait.
Faces amazingly dumb, appeared immediately...

Yury Tynyanov, Death of Vazir-Mukhtar.

Recently classical concept of archetypes got its second wind – because of arrival of the so-called 'systemic-informational approach.' (About this

new and rather universal view on the humanities see, e.g., Golitsyn, 1997; Golitsyn & Petrov, 1995; Petrov, 2007, 2017.) In the framework of this paradigm, the *mentality* of any person (which is considered as a constituent of the cultural system to be analyzed) is nothing else than a combination of several *fundamental, archetypical parameters* inherent to any subject. Moreover, some measurement procedures were derived for quantitative *estimation of these parameters* (see, e.g., Mazhul & Petrov, 2014). But what is much more substantial – the fact that these *personal parameters* occur to be rather *stable*, as if they were ‘assigned’ to each given subject – as well as stable are *social roles* of these personages.

However, we decided not to be restricted by personal features: perhaps, such ‘parametric worldview’ can be extrapolated onto the phenomena possessing much *broader scope* – up to the whole *artistic directions*, and maybe, even to some entire *epochs* in the *national socio-psychological life*, including all its aspects?

We shall analyze one of such supposed large-scope phenomena, illustrating our narration – with some examples, borrowed primarily from the history of European social and cultural life of the 19th – 20th centuries.

[In the given text, we shall resort to the help of methodology which seems to be unusual for us – in the context of our previous investigations. (Though for many authors belonging to ‘genuine humanitarian’ traditions, this methodology is habitual.) We mean rather preliminary, hypothetical character of some conditions involved, as well as conclusions obtained – both would need appropriate strict empirical confirmation, desirably based on quantitative argumentation. Nevertheless, we have certain indirect quantitative empirical evidences, and ‘hints’ concerning the strategy prospective for possible future studies. However, in total the ‘status’ of our entire consideration, may be named ‘half-hypothetical,’ and it may be treated as nothing else than a prospect of future fundamental investigation. We wouldn’t publish such preliminary results – but it might occur too late – to wait for more fundamental sources, in the light of possible menace for the entire system of culture, this ‘bad version’ of future dynamics being discussed below.]

So, let’s start from the foundations of the *contemporary concept of archetypes*, considered in the light of the *systemic-informational approach*.

1. Hierarchy of binary oppositions characterizing mentality

This new paradigm proclaims the system's *need for binary oppositions*, which is deduced from the necessity to realize the *division* of any cultural (or social) system – into a set of *branches*, i.e., more or less stable groups of objects (or subjects). Really, such 'branching' was observed also in some multi-element systems relating to pre-human stages of the evolution. Thus, quite obvious is the *division* of the *biological sphere* into a set of species, as well as *splitting* of most advanced species into males and females; *splitting* of any advanced *religious system* – into two or several versions (e.g., into Catholic and Orthodox Church, to say nothing of their numerous subdivisions); as well *literature* is split into poetry and prose, each of them – into different genres and stylistic branches, *etc.* General model for this phenomenon – which is usually named «*splitting*» of the system – was recently theoretically deduced in the framework of the systemic-informational approach (Petrov, 2007).

However, to concretize the regularities dealing with the deduced phenomenon of branching (splitting), it seems desirable to proceed from some non-trivial considerations rooted in the *nature of elements* constituting each system studied. So, when speaking of *social or cultural systems*, we should connect the *character of splitting* – with certain *psychological features* of subjects involved in such systems.

In general, our systemic-informational approach contains at least one point deserving to become the ground for splitting in question. This 'key point' is nothing else than the very tendency to form '*oppositions*': the system possesses inclination towards definite '*peculiar points*' in the multi-dimensional space of possible systemic states, each of the *parameters* (dimensions) possessing the form of a certain *scale*. Usually each scale consists of *two poles*, between which possible intermediate states are located, or simply it contains two 'polar' states. In most cases, the projections (of the system's states) onto each dimension, can form an ordering: *inclination* to one pole of the scale – versus inclination to its opposite pole, – though sometimes there exist certain intermediate 'preferable points of attraction.' (For instance, in case of three such 'preferred points,' they might respond to both poles of the scale, together with 'zero point' in the middle of the diapason.) In the majority of cases, either two or three such 'peculiar states' take place for each scale. [In principle, as it was deduced theoretic-

cally, namely two- or three-gradation classification occurs optimal for any ‘non-motivated’ classification.] Nevertheless, all such orderings are usually named ‘*binary oppositions*.’

Our binary oppositions – do they possess equal ‘rights’? Or maybe, they are *subdued to certain ordering*, i.e., they possess different *degrees of importance* for the system’s functioning? In search for their ranking, it seems reasonable to deduce theoretically the *hierarchy of the most influential oppositions* dealing with the very *existence* of any system.

Obviously, the most important is the problem of the system’s *identity* – while possible temporal changes. We shall consider only *multi-element systems* – e.g., a biological species, which consists of numerous generations, following each other; quite similar is the sphere of culture – with changing each other numerous works of art, belonging to the same genre. Hence, in such multi-element systems – logically *two kinds of splitting* are possible: *spatial and temporal*, dealing respectively with different groups of objects separated in space – or in time. Evidently, spatial branching is more simple (both for the evolution and our deductive ‘construing’); that is why we shall start from ‘spatial considerations’.

Here a ‘genial device’ was invented by the biological evolution (though it is not specific for the given sphere – in principle, this device might be deduced as universal):

1⁰) The above mentioned *spatial splitting* of the system’s elements – into two ‘halves,’ one of which serves *conservation* (keeping) the system as such – providing its *identity*, – whereas members belonging to another ‘half,’ provide due *mutability* of the system’s properties. (Their diversity may occur to be claimed in cases of unpredictable future changes in the system’s environment.) Exactly such is the informational sense of *sex differentiation* (specialization) which is inherent to many advanced species, both of flora and fauna – see Geodakyan, 1983. Really, males provide due changeability of each given species, whereas females are carriers of the given species’ identity. So, we come to ‘*spatial*’ *splitting* of elements carrying different kinds of information.

Perhaps, in parallel with this identifying-aimed evolutionary process, at its rather matured stages, when the informational structures put forth, – *new ways* should be introduced – for ‘polishing’ *principal procedures of data processing*. These new ways, common for *all advanced informational systems* (and possibly taking place even within each element of any multi-

element system) – relate to:

2^o) Contraposition of *two types of data processing* (see in detail Maslov, 1983), meaning functioning of any *multi-level informational system* (i.e., system containing certain hierarchy of levels dealing with information processing – a multi-storey tower):

– information processing *within each given level* – when *small portions* of the information are processed consequently, in the framework of a *definite paradigm*, with high exactness (though usually this procedure is rather slow);

– *transmittal of large portions* of the information – to the next, *higher level* of the tower; in this case numerous informational massifs are processed in parallel; the transmission is instantaneous, being accompanied with inevitable *change of the paradigm*.

These two kinds of information processing are universal, common for various systems. In case of such a system as *human being*, these types occur materialized in *left and right brain hemispheres*, respectively. So this (rather ‘archaic’) *hemispheric phenomenon* is very important for all aspects of our psychic life. The phenomenon discussed possesses *different ‘faces’*: from *seasonal influence of the month of birth* – upon the character of activity of outstanding persons (poets, composers, generals, bankers, *etc.*, see Marzullo, 1996; Mazhul & Tyutyunnik, 2014) – to *periodical alteration of left- and right-hemispheric dominance* in the socio-psychological sphere (and its various branches, including music, painting, political life, *etc.*, see, e.g., Petrov, 2003; Petrov & Boyadzhiev, 1996). Hence, ‘spatial’ splitting of the system occurs (also) practically realized by *temporal means*.

For further deductive construing the set of possible oppositions, we turn to more concrete problems (nevertheless, of general systemic character), and first of all to:

3^o) The typology of human behavior based on the subject’s *maximal value of the resource mobilization*, meaning both the *force of nervous processes* and usual physical force. Here *two ‘polar’ types* occur possible: *weak and strong*. As a result, the change of environmental conditions may cause quite *opposite reactions*: for ‘*strong subjects*’ the increasing of the environmental entropy causes the *growth of activity* and its effectiveness, whereas ‘*weak subjects*’ show *decreasing diversity of activity* and its diminishing effectiveness. Such a typology known from the times of Hippocrates, now experiences the ‘second wind’ due to achievements of the

systemic-informational approach. Every person can be ascribed to one of these two poles – or to a certain intermediate degree between them – with various rather fruitful consequences, both psychological and social.

“In artistic creativity, the difference between ‘weak’ type and ‘strong’ one is nothing else than the distinction between artistic temperaments. Weak type is characterized by low diversity of reactions: laconic, restrained features, stingy expressive means, inclination to small forms, attention to details, preference for nuances, ‘transparency’ of art language, and so forth. On the contrary, strong type is marked with violent colors, wealth of expressive means, preference for contrasts, ‘dense ecriture,’ inclination to large forms. <...> Of course, this difference in temperaments is inherent also to recipients, and it determines their reactions to works of art. Thus, for a recipient of ‘strong’ type, creativity of an artist of ‘weak’ type, may cause the state of monotony, i.e., it seems to be too curt, dull, and languor. On the contrary, a recipient of ‘weak’ type reacts on works of a ‘strong’ artist by the state of the strain, irritation, impression of being too sham, rough, devoid of taste” (Golitsyn, 2013, p. 49). Perhaps, namely here hidden is a mysterious *G-factor* which is supposed to be rather important for various kinds of human behavior?

And, naturally there may exist certain other phenomena, though not so universal – but rather important for ‘human-containing’ systems. Among such oppositions dealing with *inter-personal relations*, undoubtedly the most influential is

4⁰) The contraposition of *introvertive and extravertive styles* of thinking and behavior. This well known phenomenon (see, e.g., some of its concrete examples in political life of different countries – Simonton, 1994) is very important for *social sphere*. There is no need to describe it here in detail; it relates to evident features and hence, it is familiar to psychologists (and even to broad circles of amateurs – see, e.g., Laney, 2002). The systemic essence of this phenomenon is nothing else but the subject’s *orientation*: primarily either on *internal or external source* of the information subdued to processing by the system – e.g., by the human being. And this orientation is provided by different neuromediators – for introverts and extraverts.

Finally, in order to complete the above classification, it seems reasonable to resort to the help of an opposition which would *combine* the above four previous ones:

5⁰) The degree of *self-consistency* (i.e., mutual co-ordination) of the features – both the above four parameters, and possibly some other ones, characterizing the mental life. It means *statistical links*, i.e., *correlation* between the parameters. To *materialize* such correlation, we should use due *mechanisms*, e.g., the link between hemisphericity and the extraversion or introversion – which may be provided by appropriate *hormonal means*.

Summarizing the above consideration concerning the most substantial possible *grounds for the system's branching*, we come to Table 1.

Table 1. “Features of features” – hierarchy of possible most important grounds for the system’s branching

<i>Basic function</i>	<i>Mechanisms involved</i>	<i>Examples of realization</i>
Supporting the system’ identity – but conserving the system’s mutability	Spatial division into two parts: carriers of constancy – vs carriers of mutability	– Sexual differentiation – Division into a set of genres
Polishing principal procedures of data processing	Spatial or temporal contraposition of processes within the given level – vs inter-level transitions (the phenomenon of hemisphericity)	– Individual hemispheric difference in creativity – Influence of the month of birth on personal activity – Periodical oscillations in the style of the socio-psychological sphere and its branches
Supporting the flexibility of the system’s behavior	Spatial phenomenon - using different degrees of maximal resource mobilization	– Weak type of nervous system – vs strong nervous type
Stimulating growth of diversity when inter-personal relations	Spatial phenomenon – using different degrees of ‘autonomous’ personal behavior	– Introvertive style of behavior – vs extravertive style
Supporting the integrity of the system, both personal and cultural	Introducing correlation between parameters (oppositions)	– Statistical link between hemisphericity and introversion/extraversion

Of course, there may exist some other parameters participating in the subject's mental life (e.g., the degree of the subject's happiness, which quite recently became an object of measurements realized by means of a non-verbal, visual test – see Mazhul & Petrov, 2014). But exactly the above *five parameters* were deduced theoretically as the most substantial from the systemic point of view. That is why namely they will be used in our further 'archetypical deductive construing.'

2. Combining features – with each other and with the system's environment (static situation)

The above features are supposed to be capable of forming more or less *stable combinations* – namely these 'steady alloys' would respond to our *archetypes* discussed.

Of course, not all combinations can come to such '*harmonious alloys*' – in some versions, the above parameters may occur incompatible with each other. What about the number of such combinations? – If to suppose each feature containing only two gradations (e.g., weak or strong type of neural activity) – then in total $2^5=32$ 'archetypic combinations' are possible, and out of this diversity it would be desirable to single out 'due alloys.' And when supposing more 'soft' three-gradation version – the number of possible variants subdued to singling out, would become $3^5 = 243$. Hence, our 'procedure of deductive construing' affords enough freedom for choosing due 'archetypic alloys.'

Let's consider a conditional *example* which would illustrate practical realization of such '*archetypic alloy*.'

We can imagine the mentality of a certain *hypothetical subject* living in contemporary social (e.g., Russian) conditions, the features of this subject being the following:

1⁰) Our subject belongs to *females*, and besides, relates to the most 'pronounced' representatives of the mentality inherent to females – e.g., preference for intuition, traditional attitudes and values, *etc.*

2⁰) She is marked with rather strong *right-hemispheric dominance* – with all its attributes, and first of all, inclination to intuitiveness (again!).

3⁰) She may be characterized by *weak type* of neural activity, with dominating interest for nuances, preference for small objects, *etc.*

4⁰) She represents *extravertive style* of behavior.

5⁰) She possesses *high co-ordination* ('harmony') of the above features, as well as their good agreement with conditions of professional activity, as well as the entire life.

To what conclusion can we come, analyzing this *set of parameters*? – Evidently, they *don't contradict* each other. Moreover, we may see, e.g., a charming *image* of a young (possibly) lady – in the role of an investigator (specialist in crime detection); she successfully uses her intuition (as well as her charm) in numerous contacts with rather cheerful colleagues, and other features inherent to her mentality. Apropos, some other professional spheres and roles may occur advantageous for such lady (in contemporary social conditions) – but not the role of an armed robber or a trouble-maker. So, even this example evidences of important role of '*fitness*' of our singled out 'alloys' – to appropriate places (roles) which are 'dictated' by environmental conditions. Hence, obviously, the *degree of this 'fitness'* determines possible differences between various cultures (or subcultures, or societies). Really, the above '*nomenclature*' (catalogue) of 'stable alloys' is 'universal and eternal' – it is determined genetically. But we may suppose that some 'archetypic alloys' can occur *well adopted* for one culture (or subculture, or the entire society) – but are *hardly adopted* for another culture. Hence, in some cultures certain 'alloys' occur *widespread*, and certain other ones – are not widespread. As well, the '*social weight*' (importance) of different 'alloys' can occur different. Doubtless, here are rooted *specific peculiarities* inherent to different *national cultures*, subcultures, or societies. As well, the *need to change dominating archetypes* may occur the *driving force of cultural dynamics* (which will be discussed a little later). In any case, namely this *degree of fitness* would be capable of explaining some cultural differences – in the framework of such a system (containing the 'prescribed' list of participants). Besides, because of *re-distribution of 'weights'* (importance) of roles – any *cultural specificity* can be realized (as well as any cultural dynamics – see below).

The above model may be likened to classical theatre troupe usually containing representatives of several 'standard roles': jeune premier, noble father, and so forth. In various plays, these personages simply possess different 'weights.' (Some of 'weights' may be zero, i.e., the given classical role is absent in the given play.) Nevertheless, any topic in any play can be realized – thanks to appropriate 'distribution of weights.'

In addition, recently appeared empirical investigations, concretizing *inter-parametric links* within the above set of ‘archetypic parameters,’ as well as their tight connections with some other important features of personality. Thus, the degree of person’s *introvertive / extravertive inclination* occurs correlated with the season (month) of birth, which in turn, is connected with the degree of left/right-hemispheric asymmetry (Mazhul & Knyazev, 2018). Moreover, such indicator as the degree of the subject’s “*happiness*” (measured by the test based on visual illusions) is also correlated with the season of birth – because of the same ‘hemispheric’ reason – see Petrov, Mazhul, & Lombardo, 2015.

The situation described, is accompanied with an obstacle which might seem to be almost ‘technical,’ or ‘purely mathematical’: it deals with *statistical regularity* known under names of Zipf, Mandelbrot, Pareto, Lotka, and so on. The heart of the matter is *very high inhomogeneity* (steepness) of statistical distributions inherent to many systems dealing with human activity. (As well, such peculiarity is typical for some kinds of behavior realized by other biological objects). Here the so-called Biblical ‘Mathew effect’ takes place – *positive feedback* in the chain connecting *results of activity* fulfilled by a subject – with *future fate* of the subject, meaning his/her ability to produce new objects of such a kind. [For instance, a researcher which published during this year 10 scientific articles, possesses more chances to publish next year much more scientific articles, than another researcher having published only one article. That is why the statistical distribution of subjects’ productive activity becomes very steep.] Such ‘*stable non-Gaussian distributions*’ (see in detail Petrov & Yablonsky, 2013; Petrov, 2018) result in several logical *consequences*, out of which it seems reasonable to single out *three* ones, possibly useful for our consideration: – for the *top* of the distribution, the very concept of ‘*mean values*’ occurs to be *invalid* – because, e.g., the lion’s share (usually more than 50% of the total results of ‘collective creativity’) falls on the first, top-person (like in case of music – on Mozart or Beethoven, each in his epoch – see, e.g., Kulichkin, 2007), as well as on several close persons of first ranks; nevertheless, for most other, ‘*non-top*’ persons, the concept of mean values is *valid*; – namely these *top-persons* are capable of determining the entire paradigm of activity in a certain branch of culture which can be controlled by *voluntary unpredictable efforts*; – persons belonging to the very top’ of the distribution, are subdued to

regularities sharply differing from ones for the entire massif (about quantitative estimations concerning creative peculiarities of geniuses, see also Petrov & Locher, 2011); that is why any *empirical investigation* aimed at the creativity of *outstanding persons* (leaders of the given cultural branch), should be based on rather *small sample* – up to 20-30 top-persons (see also Marzullo, 1996).

[For me personally, the whole history of the Russian socio-psychological ‘atmosphere’ – at least during the last century, with numerous versions for several subcultures – is raised before my eyes: typical images of such personages as so-called ‘nihilists’ of the 1870’s, ‘enthusiasts’ of the 1920’s, underground poets of the 1960’s, and so forth. Each archetypical image is accompanied with certain features of the worldview, details of everyday life, and so on, all these parameters forming a kind of ‘harmonious entity.’] Such are the results of our deductive analysis of the ‘*static*’ *situation* which should take place (and really takes place, as it was shown in many empirical investigations) in most multi-element, ‘human-containing’ systems. Now it is time to turn to their *dynamics*.

3. Transition to collective (mass) processes: need for novelty as a source of dynamics

As a rule, evolutionary models for systems which deal with information processing, are based on the need for *novelty*, *maximization of information*, and so forth. Such was, for instance, the concept of *Russian formalist school* of 1920’s which proclaimed ‘automation’ of old ‘devices’ of art (which had been used previously), and the feeling of ‘strangeness’ of prospective new devices. As well, recently Colin *Martindale* (1990) proceeded from the *need for innovations* which would determine positive perception of novelties carried by each new work of art. [In his famous book “*The Clockwork Muse*” (1990) he devoted to this problem the whole Section entitled “*The Law of Novelty*.”] Moreover, he proclaimed inevitable ‘*death of art*’ in nearest future – because of exhausting potentialities of innovative activity in all kinds of art (Martindale, 2009).

And namely in such specific ‘genuine informational’ field as *science*, *Martindale* also found periodical oscillations – alternation of *styles of thinking*, this periodicity being caused by the necessity to *renovate the paradigm*

dominating in the given field of science. He analyzed publications in psychology, linguistics, literary studies, *etc.* – during more than a century. Fig. 1 shows one of his results – periodical pulsation of the ‘*primordial content*’ in articles published by *Psychological Review* during 1895–1985. [Beside oscillations, one can see also a long-term trend: primordial content fell throughout the behaviorist era and began to rise with the introduction of the cognitive paradigm.]

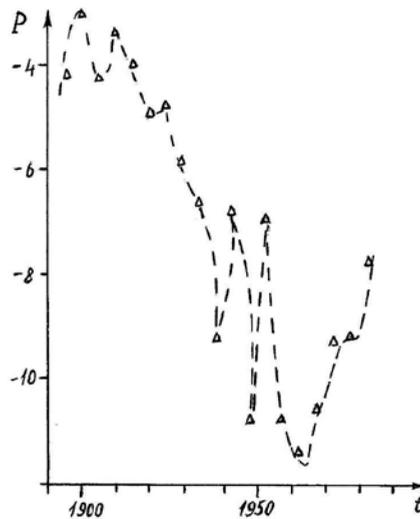


Fig. 1. Evolution of the average amount of primordial content (P) in the *Psychological Review* during 1895 – 1985 (on the basis of Martindale, 1990, pp. 364-365).

Much broader scope of the ‘need for paradigmatic novelty’ was examined by Sergey Maslov (1983): he discovered periodical oscillations in the style of the entire *socio-political ‘climate’* of several countries – during several centuries. Fragments of his results are presented by Fig. 2 – the evolution of the socio-political ‘climate’ in Russia (upper curve) and the style of Russian architecture (lower curve) during last two centuries. [Only periodical components are shown.] Here positive values of the ‘index of asymmetry’ (in both curves) designate general inclination to ‘analytic’ (“left-hemispheric”) style, whereas negative values relate to ‘synthetic’ style (“right-hemisphericity”). Both curves reveal synchronous periodical change with full duration of cycles about 48-50 years.

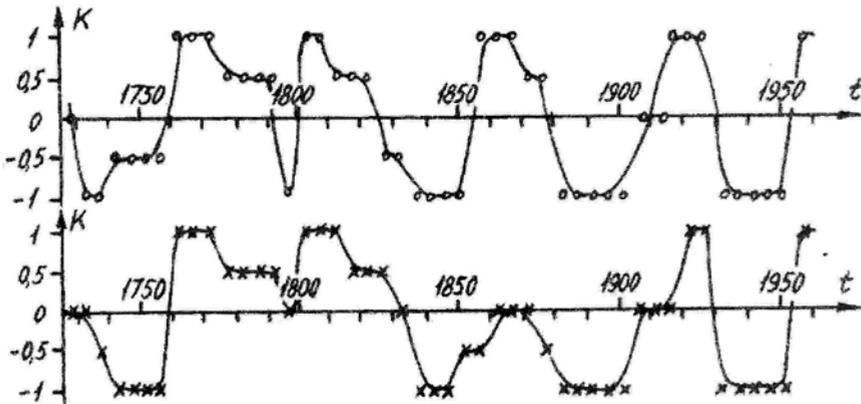


Fig. 2. Periodical component of the index of asymmetry (K) of the socio-political “climate” in Russia (upper curve) and style of Russian architecture (lower curve), on the basis of Maslov’s data (1983).

In the framework of all such models, the ‘informative innovations’ (i.e., the degree of novelty) of cultural objects are considered (as well as perceived by carriers of the given culture) – as *deviations* from certain ‘habitual’ level, i.e., *average value* for previous objects of such kind. And exactly this average level reveals quite definite *evolution*, possessing rather pronounced *periodicity*. [Here we deal with mass processes, so the procedure of traditionally calculated mean values is valid.]

In principle, *typical evolutionary behavior* of any ‘mass parameter’ should possess *two constituents*, and we do see both constituents in each case:

- *monotonic long-term trend* towards ‘*due*’ (‘ideal’) *state*, which is currently determined by the distribution of ‘forces’ within a broad, ‘contextual’ system, embracing the given concrete system;
- *oscillations* against the background of this trend (something like ‘high-frequency tremor’), caused by attempts to reach – by ‘trials and errors’ – this ‘desired state.’

More clearly the combination of these constituents (as well as their connections with other parameters) is illustrated with example shown by Fig. 3: trajectories of three parameters – their mean values for such a device, as *rhyme in mass Russian poetry* – a fragment of the results of an investigation devoted to poetical evolution, see Shepeleva, 1989. Each year was characterized by average values of three parameters of rhymes used in 30

poems published in Moscow or Saint-Petersburg literary journals: position P of the center of the *rhyme consonance* (remoteness from the right edge of the line, measured by the number of phonemes), its richness R (the number of coinciding phonemes), and its deviation D from exactness (also estimated as the number of phonemes – but differing in both members of the consonance); the representative character of the sample was proved. Here both *tendencies* mentioned: *monotonic trend* (increasing average value of each parameter) and *regular oscillations* (with period of cycles about 11 years) – are clearly seen. Monotonic trend characterizes the growing masterpiece of poets, oscillations their search for novelty.

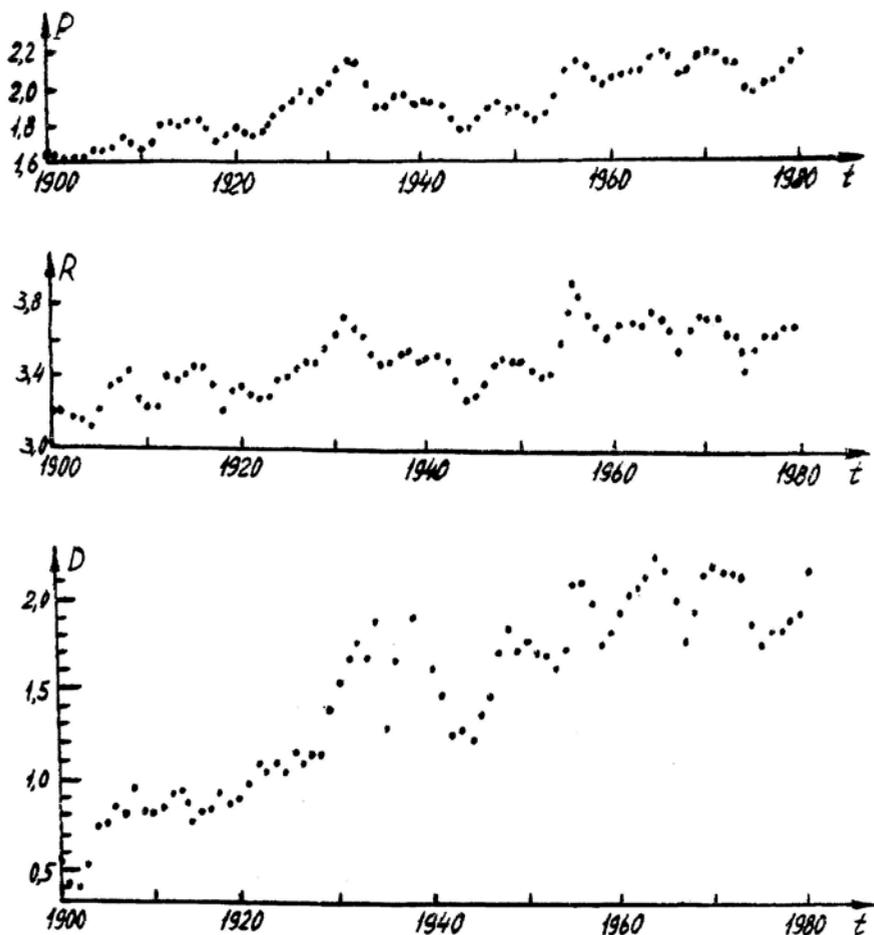


Fig. 3. Three parameters of Russian rhymes: fragments of evolutionary curves.

Rather original example of analogous temporal behavior is the phenomenon of ‘*vibrato*’ – considered as a musical device (though the sphere of its real applications is much broader – see, e.g., Petrov, 2016). Here the temporal scale is quite small: either the intensity or the frequency of a new musical sound, being firstly constant, afterwards becomes subdued to periodical oscillations (with growing wing), in order to provide the ‘novelty’ carried by the signal; however, at last, sooner or later, the *effectiveness* of such ‘*innovative efforts*’ occurs exhausted, and the given sound should be replaced by certain new sound – hence, the life of the previous sound occurs completed; then the procedure of temporal changeability can be repeated – but on the basis of a new ‘raw material’ (e.g., new frequency or new level of the sound loudness).

In all these examples – as well as numerous other situations of temporal behavior of human-containing systems – we actually dealt with *co-existence* of the above *two principal constituents*: monotonic trend and oscillations. [Though sometimes we deal with some ‘reduced’ (‘degenerated’) versions, e.g., when we observe only one constituent.] The scales of both may vary in a giant range: thus, the period of regular oscillations may be less than a second – or more than a year or even several decades.

But it is time to return to the logical line of our narration: the archetypes discussed – how they can participate in the evolution described?

4. Archetypical dynamics in various systems: general regularities

As far as our narration concerns various kinds of systems which contain such *specific elements* as human beings belonging to definite fixed *archetypes*, we should start from *two general dynamical problems* caused by this peculiarity.

Firstly, in principle, the dynamics of such systems – how it can be practically *realized*? – When archetypical features of the system’s elements are fixed (i.e., all the members of the theatrical troop are clear) – there may exist only *two ways* to realize its dynamics:

– To *arrange the elements* by such a manner, that the number of the elements responding to different archetypes, would be in agreement with appropriate *dynamic requirements of the environment*. It means nothing else than to *choose* namely such *elements* to be included in the given system,

whose archetypes are needed for each *current moment* of the system's dynamics. For instance, when in nearest future a giant war is expected – then mainly men are needed, and primarily those which belong to 'strong type.' However, to use this way – seems to be not prospective – at least at the current phase of social and scientific development (to say nothing of arising ethical problems). Besides, the environmental requirements can vary so quickly, that it would occur technically (and ethically) impossible to replace the elements of the system. That is why we shall not dwell upon this (non-humanistic) way. [Apropos, in the process of the biological evolution (and partly social one), there were attempts to use this way – we mean the 'phenomenon of pre-war babies': just before the war, the share of newborn boys usually slightly increases – in comparison with the number of newborn girls; however, this effect is rather small, not exceeding several percents – see, e.g., Iskrin, 2005.]

– To *arrange social weights* of elements belonging to 'due' archetypes, i.e., those ones which are needed for *current dynamical requirements of the environment*. For example, in case of war, those personages occur more influential, which belong to 'strong type'; in other words, the character of the *social structure* should be changed. Because of many reasons (including, in particular, ethical ones), this way seems to be more prospective. Secondly, in the framework of the above second way (based on social weights), we should pay attention to possible *limitations*, caused by the above mentioned elements' peculiarity – ascribing each person to a definite '*stable alloy of archetypical features*.' Here some *temporary scales* should be meant. Clearly, no person can be subdued to evolutionary changes possessing *time constants* commensurable with seconds. Moreover, we may suppose that there exist certain '*optimal time constants*' – commensurable with *temporal characteristics of typical human life*. Perhaps, there exist some *natural presuppositions* for such 'optimality concept'? – We should look for such motives, turning to inter-feature links: if they are steady, and at least *one feature* out of five traits characterizing the given archetypic 'alloy' ($1^0 - 5^0$), occurs '*glued*' with certain temporal regularity – revealing correlation with certain regular pulsation; then the whole 'alloy' would be also '*attached*' to the same pulsation – of course, with same temporal regularity.

And really, we do know such feature, which possesses regular pulsation, and is tightly connected with other archetypical features. It is nothing else

than *hemisphericity* (2^0 – inclination to left or right style of thinking). In fact, this feature usually shows rather regular *periodical oscillations*, with full period of cycles about 50 years (see Fig. 2). And this feature is very ‘mighty’: it is tightly correlated, e.g., with such ‘archetypical feature’ as neural force (3^0). Moreover, in some cases it is simply a ‘copy’ of the parameter mentioned: thus, the investigation devoted to creativity in the field of painting (Petrov & Mazhul, 2017) showed that exactly the ‘index of creative asymmetry’ of painters is proportional to the ‘index of neural force.’ [Evidently, it was not without reason that the evolution chose such a ‘comfortable dwelling place’ – at once for both visual parameters. Nevertheless, it occurred not so for musical creativity: for composers, ‘more convenient’ occurred own place: special dimension perpendicular to hemispheric axis at the picture built by principal component analysis (see Mazhul, Petrov, & Mazhul, 2016).

Hence, we may suppose that at least certain archetypes should participate rather regularly in the socio-psychological life – with periodicity close to cycles caused by hemisphericity, i.e., about 50 years. [Besides, of course, attractive occur also periods divisible by 50 years, e.g., 100 years, 150 years, and so on.] Maybe, other similar reasons are capable of causing cyclic *repetitions* of certain ‘bright’ *archetypes* – in the roles of personages characterizing some moments of the evolution (examples of such “bright doubles” are presented in one of our previous publications). Thus, in the field of *poetic creativity*, two such archetypic persons are clearly seen in Russia, being separated from each other by temporal gap of half a century. (This gap exactly responds to full duration of cyclic processes in the socio-psychological sphere.) These two personages – which may be considered as almost ‘*archetypic doubles*’ (though of certain personal peculiarities) – are:

– Sergey YESSÉNIN in 1920’s;

– Vladimir VYSSOTSKY in 1970’s.

Both were very popular in appropriate Bohemian circles, both were marked with inclination to alcoholism, both married ‘imported’ (foreign) wives – besides, very famous actresses (American and French, respectively), both were slightly opposed to Soviet regime, and so forth. And of course, both experienced the primes of their creative lives while rather pronounced left-hemispheric waves in Russian socio-political ‘climate’ (see Fig. 2). No doubt, one can find many other bright examples of such ‘*archetypic dou-*

bles.'

Moreover, sometimes the whole '*collective phenomena*' were observed in certain national cultures. For instance, in Russia such 'mystic phenomena' were widespread – on the borderlines between the 18th and 19th centuries, as well as between the 19th and 20th ones – as *table-turning* (in the high life) and *oracles* (among the common people) made by *witches*. Meanwhile, both phenomena are not 'prejudices' – they possess '*material roots*.'

In fact, the informational essence of both phenomena is nothing else but good agreement, '*harmony of forecasts*' realized *in parallel* by different levels of the human system of information processing, on the basis of different, independent raw data. (Appropriate model – with *intuition* as its main constituent – is now in the stage of elaboration.) The 'harmony' presupposes due '*witch-like archetypes*' widespread among the population. [It was in the middle of the 19th century that great Russian prose-writer Nikolay Gogol mentioned half in joke: at the market of his native village, almost all womenfolk – were witches.] In Western Europe such women were burnt, and when visiting one of Austrian medieval castles, I saw a 'special hall' for this procedure, in which several hundreds 'witches' were executed. That is why appropriate *archetypes* are met very *rarely* in West Europe – in contrast with Russia.

[Apropos, similar 'effect of harmony': comparing results of parallel processing information from several sources – can be obtained, when resorting to the help of such 'computational structures,' as octopuses: each of them possesses eight brains functioning simultaneously! Perhaps, that is why exactly octopuses are sometimes used when half-mystic forecasting?]

But again '*revenons á nos moutons*' – meaning nor archetypical personages participating in the evolution, – but its *logical line*. It is nothing else than an '*onward march*' with *intermitted offensives* ('attacks') and *retreats* ('withdrawals'). The *scales* of these processes may vary in a giant diapason – concerning both the *number of elements* constituting the system studied, and *temporal constants* characterizing its dynamics. Are these two connected with each other?

Once upon a time, Colin Martindale (1990) considered some aspects of this problem, proceeding from the concept of 'arousal potential' derived by Berlyne (1971). Martindale concluded that "*In general, the more an audience is exposed to a type of art, the faster the art should change. This assumption leads to specific predictions: we should find higher rates of*

change in living room furniture than in bedroom furniture, in everyday dress than in formal dress, and so on” (Martindale, 1990, p. 52). However, we think, substantial is not only the very process of immediate perception – but also the ‘*social diffusion*’ of the information concerning the innovative character of objects perceived.

[Sometimes this socio-psychological phenomenon occurs rather influential. Thus, the opinion about the quality of the theatrical performances in Russian provincial artistic life (see Petrov, 2018a), occurred to be three times more weighty than personal impressions themselves; in other words, ‘impressions received by hearing,’ are much more important than ‘impressions received by personal, own vision.’ In other words, rumors translated via members of the subject’s ‘reference groups,’ are more important – in comparison with consequences of the subject’s own visual impressions.]

Meanwhile, social diffusion needs *enough time*, depending on *scales of the social environment*, – as well as, perhaps, on some of its properties. For example, let’s consider such global phenomenon as possible ‘billow-like processes’ in the *world religious system*. Here the *long-term monotonic trend* should respond to continual *growth of centralization*, i.e., replacing polytheism – by monotheism, together with increasing *spiritual (mental) inclination*. [These are simply two different ‘faces’ of the same ‘principal centralizing monotonic tendency.’] As for the *second constituent* of the evolution – due *changeability* reveals itself in ‘branching,’ – this phenomenon being capable of realizing at rather ‘*matured*’ stages of the system’s development (Petrov, 2007); *that* is why serious inter-branch differences did really ‘appear at the world stage’ relatively lately. We mean the contraposition of two main countervailing religious systems: *Christianity* – and *Islam*, which became an ‘influential personage’ about 600 years after arising Christianity, – as its ‘main opponent,’ a ‘*retreat*’ on the trajectory leading to ‘triumph’ of pure, ‘genuine incorporeal mentality.’ [Possibly, further branching of each of these countervailing religions, is rooted in the same systemic reason, being caused by continuing growth of ‘anti-corporeality’; but perhaps, some other foundations also started to function?]

As for the *rates of dynamic processes* within each religious system (e.g., its expansion – conquering new lands), these should evidently be, at first, rather fast (when the given sudden innovation appears). But afterwards the rate of changes diminishes – while the process of diffusion of the novelty through great vastness of ‘embraced’ lands. [Perhaps, further ‘branching’

of each religion, should follow the same logic.] So, maybe, the religious sphere relates to the ‘slowest part’ of the entire spectrum of possible dynamic changes and appropriate archetypical repetitions accompanying these evolutionary processes. [That is why it is difficult to retrace such concrete archetypical phenomena.] On the contrary, the fastest changeability should be inherent to dynamics of fashion (here we agree with the above cited opinion of Martindale).

But in general – irrespective of any archetypical aspect – what is the *social (cultural) role of rates of changes* in our dynamic processes? – Evidently, this role may occur rather important in certain situations. On the one hand, some social systems (or institutions, e.g., science) can exist only when expanding the system’s scales, i.e., when growing the number of the elements (and hence, increasing the financial support). However on the other hand, sometimes too large rates of changes may occur pernicious for the social system (or institution). Thus, during the 20th century, the population of China increased approximately 10 times – and such giant growth resulted in catastrophic consequences, which revealed themselves even in the sphere of international relations (e.g., in spite of traditional peaceful Chinese character, attempts to conquer some neighboring regions took place: Tibet and some zones of Russian Siberia).

So, our hypothetical changes (part of which being fixed by empirical investigations) caused by tight connection with *50-year cycles* of left or right hemispheric dominance, belong to the middle of the diapason of possible oscillations. That is why namely this scale of cycles occurred to be the *most convenient* for the majority of dynamic processes in social and cultural systems.

However, we should dwell upon *two problems* which seem to be far from the logic of our narration, but – alas! – in reality are important for any investigation in human sciences.

5. Collateral tasks: individual trajectories of archetypes and their social estimations

Sincerely, the forthcoming section reminds of a passage in a short story by Andrey Platonov. [I think, this prose-writer (1899–1951) was the most genius out of Russian authors of the 20th century – concerning both stylistic-

tic features and philosophical content.] He describes thoughts of a typical Soviet chief – bureaucrat of the 1930's, and suddenly an idea comes to light in his sclerotic mind: *not to forget to compile the Long-Term Plan of the Economy of the USSR for nearest 20 years – the deadline is a day after tomorrow!* Hopefully, our narration in the given section, would not occur subdued to such logic!

Our *first motive* deals with *individual trajectories of archetypes*. It means that though the principal features of each archetype are fixed, for each concrete person they should inevitably be *evolving*, from the start – till the end, i.e., the subject's death. Perhaps, there exist certain *regularities* inherent to this evolution of each archetypic personage? Thus, the above mentioned witch-like women archetypes – maybe, they appear not at once, – but in the course of certain development of some ladies till definite age? (Half a joke!)

The cause to analyze this motive, was given quite accidentally, while a lecture of an outstanding leader of international Nobelistic Movement, before an audience consisting primarily of elderly researchers. The lecturer spoke about life and activity of many Nobel winners which had been investigated by numerous scholars, trying to find regularities in creative processes crowned with such high-level achievements. He spoke about several aspects of creativity, and in each case he concluded: it occurred *impossible to find any regularities* in this field. Each such conclusion was accompanied with the lecturer's contended smile, as well as with many smiles (also contended) of most audience: OK, nobody is capable of revealing the creative secrets, and we – also; hence, we are right! So, the common opinion consisted in the *absence of any possibility* to establish *regularities* in question, and namely common *sceptic smiles* occurred decisive for me. [Here the negative result obtained – became a trigger when forming due idea, like it had been, according Efroimsson (1995), in case of forming an image of sexual attractiveness (including, of course, a 'pattern' for women's beauty) – due to 'repulsion' from negative patterns carried by the most ugly representatives of the opposite sex.]

Now we are not ready to 'construe' deductively trajectories of development for each concrete archetype. Nevertheless, we are capable of predicting certain general *methodical recommendations* concerning the most prospective ways to realize such construing. Our main conclusion is the necessity to construe *separately the way* of each archetypic personage (e.g., not to

formulate requirements common both for trajectories of witches and those who burned them). At least, the very *duration* of each trajectory should be evidently *specific* for each archetype. Certain ‘hints’ – indirect evidences – of such ‘*individual limits*’ were obtained by Lidia Mazhul (2019) when studies of the phenomenon of longevity. [Apropos, this ‘individualizing’ advice agrees with general ‘individualizing tendency’ which puts forth in contemporary medical practice, in most countries.] Nevertheless, investigations in this direction are now in the initial stage of development.

However, much more important is the task of ‘*performing due roles*’ by each concrete archetypic personage, especially important being situations when these personages belong to the *top* of a certain *hierarchy*. Really, as it was mentioned earlier, this top is capable of *directing the development* of the entire “subdued” system – *voluntary* in arbitrary (or almost arbitrary) side. So, the trajectory of the system considered – may occur *dangerous* both for the system considered and its environment. For instance, if the Minister of Defense of a certain state belongs to ‘strong’ type of neural activity (characterized by high value of appropriate index), he/she may organize the system’s trajectory in such a manner that *remote consequences* of the system’s development (controlled by his/her subconscious) – occurs contradicting his/her *immediate consequences* which are proclaimed officially. Hence, even the war may become the result of such contradiction – if all the members of the system’s top will occur unanimous concerning their subconscious inclinations. Exactly such is contemporary situation in several countries. As well, before the First World War, when famous mathematician Poincare heard about his brother – as a new President of France – he exclaimed: “*It means a war!*” – because the mathematician was informed about the archetype inherent to his brother! And he was right!

Anecdotal version of this situation takes place, when the Chief of Fire Service in a certain firm – occurs interested in agitation caused by such events like fire – though his direct duty is quite opposite. Which of these inclinations will gain the upper hand? – Really, it is well known: each our defect is simply the continuation of a certain our virtue!

[So, perhaps it was not without reason that famous Soviet pseudo-dissident poet Eugeny Yevtushenko (described by Alexander Zinoviev as ‘poet Raspashonka,’ this word designating in Russian something ‘wide open,’ sincere) wrote rather popular song:

Do Russians wish to start a war?

Truly, at that time most of Russians did not wish to start a war, – though in their subconscious the whole spectrum of ideas were dominating, responding to appropriate archetypes. So the poet was only partly crafty – though his genuine intentions are now becoming clearer – especially in the light of contemporary dynamic changes towards aggressiveness! – These changes could be predicted even at that time, their archetypic basis having been created during several decades of totalitarian regime.]

Turning to our *second motive*, which possesses ‘*social coloring*,’ it seems reasonable to distinguish between *two aspects of activity* realized by the person (which represents definite archetype):

- current social estimations of activity;
- ‘eternal’ estimations possessing strict informational foundations.

Of course, former (‘actual’) are usually much more widespread – both among the researchers and the population, mainly because of connections with various political, economic, etc. factors. Nevertheless, now we shall dwell upon the latter kind of estimations: exactly they are ‘genuine systemic,’ i.e., responding to the destination of such measurement: how much effective are the efforts of participants of the given activity?

Here the key aspect is the *wave-like ‘fate of innovations’* – irrespective of their nature. [In the framework of the given text we have slightly touched on this aspect.] Namely the sequence of ‘*attacks and retreats*’ is the mainstream of the development of any system. Hence, any *estimation* concerning the system’s movement along the trajectory, would be inevitably based on the *rate of changes* experienced by the system while moving. Naturally, the earlier comes each due new step of the evolution – the higher would be *positive systemic estimation* of the participants’ activity.

Let’s illustrate such social (and ‘eternal’) estimations – with two examples concerning rather specific direction of artistic life of the 20th century as *futurism*. Both branches of this direction: *Italian and Russian futurism* – appeared almost simultaneously, in 1909 and 1910, respectively.

[For me personally, with this direction connected is the whole set of associations. Firstly, once upon a time, I visited New York (concerning different matters) more or less regularly, with gaps about ten years. And while each visit, e.g., in 2000 and 2010, in Guggenheim museum, a giant exhibition was held, devoted to Italian futurism. Secondly, more than half a century ago, I was acquainted with famous painter David Burliuk – leader of Russian futurists in the 1910’s, ‘god-father’ of Vladimir Mayakovsky,

the most eminent popular poet of this movement. Thirdly, I was acquainted with Victor Shklovsky – former leader of Russian formalist school, which had provided theoretical basis for Russian futurism. So, my personal impressions confirm our theoretical consideration.]

There existed *only two branches* of this movement: in Italy and Russia, each developing rather autonomously. The relations between them were slightly complicated, including well known quarrel between Filippo Marinetti and Velimir Khlebnikoff while famous discussion in Moscow Polytechnic Museum (1912). Both branches arose due to ‘fitness’ of appropriate archetypic personages – to social conditions in both countries in the beginning of the 20th century: neither Italy nor Russia were in the center of ‘world events’ – but deserved to be, because of rather rich cultural traditions! So, both countries were ready to jump over the gap separating them from several more advanced countries. (Several decades ago, analogous ‘jumping trial’ was undertaken by Mongolia, and I saw awful consequences of this trial!) That is why almost identical intentions (and ‘reference points’) were typical for archetypic personages in both national branches: orientation to youth (and young generations), warlike moods, inclination to modern technical innovations, and first of all aviation, etc. [It was not without reason that one of leading poets of Russian futurism, Vassily Kamensky was a pilot!] Nevertheless, certain discrepancies between two branches were observed, in particular concerning attitudes to such delicate matters as women’s beauty.

But what is now much more interesting for us – *social estimations* of both national branches. Most leading personages in both countries, because of their *archetypic peculiarities* – joined the new ‘radical’ political power: Mussolini and Bolshevik regime, respectively. Of course, in both cases futurists were mistaken – meaning their support of concrete political forces. Nevertheless, due to futurists’ efforts – the artistic *evolution* (mainly in fine arts and poetry) in both countries was *accelerated*, and some innovations were introduced, which *enriched the arsenal* of means at the disposal of culture.

Duality inherent to social estimations of cultural phenomena, should be taken into account when considering various theoretical problems – both of social sphere and cultural one, as well as when practical decisions concerning social and cultural politics.

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THE EXTENDED DIMENSIONS OF THE SPACE GENERATIVE NARRATIVE

Abstract

Resuming the exploration of Space in six dimensions, we will compare our experiences with the intention of producing the ultimate demystification of its representation. An apparently impossible task will guide our research into what is considered inconceivable today.

By deconstructing the paradoxical situation, by consciously involving ourselves in our state of crisis, we will share our positions and determine our narratives, based on what mathematicians call "Strange Attractors".

Through strategies of social consultation, asking ourselves if we will ever reach a consensus, we will collect all our attempts and systematically analyze the divergent positions in search of a significant sign.

The ultimate goal is to redefine our weak spatial perception, which has been limited by a Cartesian coordinate system for too long. We will then ask ourselves to momentarily give up our functional assumptions, losing the presumption of reaching a structured meaning. So, working on the reconstruction of the fragments of this self-referential and incoherent Reality, we will probably establish at least our own conjectures.

From June 22 through July 26, I conducted the fourth part (1) of "The Extended Dimensions of Space", Generative Narratives, an event held at Metaestetica, the artistic laboratory located within Art Space Factory Phnom Penh, Cambodia's largest centre for contemporary art.

As six years before in Beijing's notorious Art Zone 798, I again presented a research on Space commencing from the overcoming of Euclidean geometry to exploring the recent mathematical theories on Strange Attractors (RUELLE D., 1971; NAZARIMEHR F., 2017).

I exposed large prints mounted on aluminium panels, representing perspectives of six-dimensional elements generated through automatic procedures (FIG. 1).

Numerous visitors engaged in the experimentation (FIG. 2), responding to the invitation on *Metaestetica's* Laboratory's Facebook page (2).

The choice of this particular location was quite straightforward (3). Thanks to Chinese investment, Cambodia is a fast developing nation (PO S., 2019) and also offers the initial conditions (CHEN C., 2014), that favoured the birth of the initial laboratory I founded in Beijing (4). A dynamic social situation, where each initiative takes place on fertile ground for experimentation and which welcomes ideas open to renewal and contagion, without the risk of conflict with established traditions (MORGNER C., 2014). The opportunity arose thanks to the initiative by a group of inspired investors from Hong Kong, Goldfame Group (5), who enabled the conversion of an industrial area in Phnom Penh's immediate outskirts into a multifunctional zone in support of a nascent residential district there. However, there are significant differences between these two labs.

When I launched the first laboratory, Art Zone 798 had already been in existence for a decade and had hosted works by renowned artists such as Ai Wei Wei, Zhang Xiaogang, Fang Lijun, Yue Minjun and Wang Guangyi. They successfully shifted a large portion of the Chinese public's interest in alternative forms of aesthetics, competing with traditional arts like calligraphy and landscape painting (JAINPING G., 2010). By then, He Yunchang's first impressive artistic work, "One Meter of Democracy", had already shocked public opinion (WEIWEI A., 2013). The active participation of the public in the events presented during my workshop highlighted the curious nature of the Chinese people but importantly, it evidenced a culture that was heading towards a rethinking of the art discipline (JAINPING G., 2010).

In Phnom Penh, on the other hand, the inclusion of Buddhist sacred art still influences the local production although artists such as those who gather around the Kbach Gallery are attempting to introduce a new interpretation and are approaching the religious theme by adopting unusual means of ex-

pression, such as the use of spray cans in street art graffiti. The contemporary art in Cambodia is emerging now and my participatory art workshops aim to contribute towards this new transition. (KAUFMANN A., 2019)

Furthermore, Art Space Factory Phnom Penh was only launched in June 2019. Most visitors come to this newly-converted industrial area to attend various events for the most part advertised on Facebook pages of the organising companies. This means that in the workshops organised at Metaestetica, there is no predetermined target group. Most participants are interested in recreational or cultural events and not necessarily possess a distinct artistic or scientific background.

The setting of the event at Metaestetica was divided into four basic phases. In the first, I exhibited two images representing two different perspective views of a six-dimensional element produced in 2013 at the Beijing laboratory. Comments left by visitors at that time were also presented. (FIG. 3)

Visitors to the Phnom Penh workshop were invited to leave their comments as well. However, while in China the experimentation focused mainly on stimulating and consequently recording the visitors' emotional or cognitive reactions, in Cambodia I encouraged exercises that were focused on producing an analysis of the subject-stimulus relationship, in order to investigate the rationale that prompted visitors to face the act of interpreting the stimulus. (FIG. 4)

Therefore, in the second phase, I explicitly requested visitors to go beyond the first intuitive considerations and speculate on the reasons for the choice made, trying to highlight the underlying strategies. (FIG. 5)

In the third part, I worked with visitors to organise the answers into conceptual categories.

In the fourth and final passage, I moved onto the modification of the generative equations of images, based on the discussion I entertained with the most active subjects. (FIG. 6)

In conclusion, since the process of generating complex images is based

on the continuous elimination of formal “redundancies” (SANTORO C., 2011) induced by my own aesthetic preferences, during the experience the subjects were free to project judgments and express views on the works based on their own background, instead of adhering empathically to any sort of pre-established concept or message.

During the event’s weekly sessions, subjects became increasingly involved since the exercise was not only enabled an introspective reflection on their own aesthetic competences but also extended their capabilities by confronting with a collective narration emerging from the statements left in the carnet. (FIG. 7)

As stated in the short Manifesto (5), which introduces the activities of the Laboratory, this approach is conducive to a Metaestetica Vision. By encroaching on fields more open to collective contributions such as physics, sociology and anthropology, it expresses a point of view on the meaning of art that projects the discipline far beyond the traditional confines of the representation as subjective expression of an artist (LOMBARDO S., 1987).

The concept of participatory art implies a process in continuous evolution in which subjects engage in a system of open relationships, questioning the established canons or producing new orders through subjective contribution and collective elaboration (BISHOP C., 2006).

In theory, the outcome should be the deepest possible transformation of the social group interacting during the experience in the laboratory. This objective requires an extended, if not very long, commitment, with obvious difficulties in ascertaining the occurring correlation between experiences and transformation.

Therefore, the recording operation is simply limited to the documentation of the processes that took place in the laboratory and the analysis of their expressive potentiality. Ultimately, rather than trying to achieve a transformation the objective of the laboratory is to leave room for any personal form of expression in interpreting the proposed stimulus, spreading from elementary “hallucinatory preconceptions” (BION W. R., 1970)

to complacent involvement of the narcissistic libido (FREUD S., 1914) or, even to intimate reparative and “anti-depressive tendencies” (KLEIN M., 1940).

Moreover, since visitors were specifically invited to explain the cognitive connotations of their emotional responses, they developed strategies of visual perception, focusing on limited portions of the stimulus, through the identification of imaginary modular elements arranged in various ways in hyperspace in order to obtain a significant logical coherence of the whole and progressively adhering to solutions increasingly considered more plausible.

In summary, while in the first place the responses of the subjects are intuitive and regulated by the chosen “metaprogram” (Robbins A., 2003) in approaching the stimulus, the subsequent critical elaboration requires more effort and in general the opinions tend to adhere to shared “cognitive constructions” (BEGER P.L., LUCKMANN T., 1966) organized through defined “structural patters” (PARSON T., 1961) that, as far as possible, are considered “viable” (VON GLASERSFELD E., 1981). Hence the emergence of narrative coherence in the texts collected during the sessions carried out in the laboratory.

Certainly, this does not demystify the unresolved issues posed by the hyper-dimensional representations (YAU S., 2010). It does, however, achieve illustrating the effort of a limited group of individuals, it defines a fascinating shared aesthetic position.

Notes:

(1)

Previous parts of the event:

THE EXTENDED DIMENSIONS OF THE SPACE – Step 03: ComPar-ing Orders, Metaestetica, Sarus Art Center Beijing 798 Art Zone, from 26.05.2013 to 22.06.2013. Text included in the flyer distributed before the event: Through morphological analysis, can individuals produce higher dimensional orders, redefining Space? The dimensional extension of the Space fostered by the establishment of the algebraic geometry allows us

to consider the conjecture on the hologramatic nature of reality implied by the latest developments of quantum theory. Starting from the six dimensions needed to understand the Calabi-Yao manifold, venturing to the mysterious eleventh dimension used to describe the subatomic strings considered by M theory, both the world of the infinitely large and the infinitely small converge towards a mathematical definition of Space that loses its meaning if it remains anchored to its simple Euclidean connotation. Yet in proceeding beyond the fourth dimension it is still necessary to rely on mental constructs not fully shared by our societies. This can imply the ability of the individual to activate a process of cognitive abstraction that restructures the reality beginning with the auto-identification of the Self. An appropriate reduction of the detailed disclosure of the phenomenological can paradoxically offer the chance to inferentially conduct a morphological analysis that through personal re-semantization of semiotic correlations between different stimuli can produce higher dimensional orders. By expressing the results of this analysis within our social system of communication, can we redefine Space?

THE EXTENDED DIMENSIONS OF SPACE - Step 02: Cognitive Inter-Actions, Metaestetica, Sarus Art Center Beijing 798 Art Zone, from 16.06.2012 to 08.07.2012. Text included in the flyer distributed before the event: Unprogrammed exhibition, performance and discussion on self-aware possibility for producing extra-dimensional reality.

THE EXTENDED DIMENSIONS OF SPACE - Step 01, Metaestetica, Sarus Art Center Beijing 798 Art Zone, from 01.05.2012 to 01.06.2012. No flyers were issued for the event.

(2)

<https://www.facebook.com/metaestetica/>

(3)

Partnership with KBach Gallery was signed on the 23rd of March 2019

(4)

Metaestetica Laboratory was hosted at the Sarus Art Center, Beijing 798 Art Zone from the May 2012 until September 2013

(5)

Broushure advertising the development strategy available at <https://www.prestigehomeskh.com/wp-content/uploads/2019/03/Urban-Village-Brochure-Prestige-Homes.pdf>

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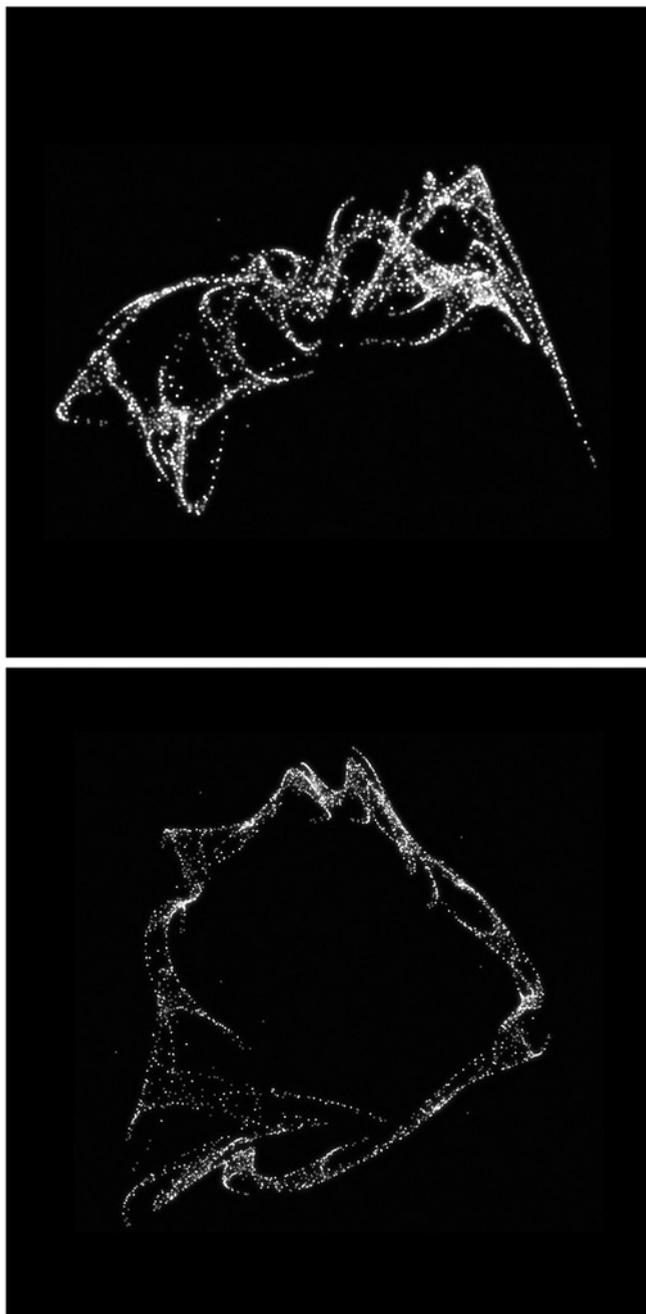


Fig. 1: Autogenerated Six-Dimensional (Similar) Strange Attractor F10, PROJECTIONS, Carlo Santoro, Beijing 2013



Fig. 2: The Extended Dimensions of the Space, Generative Narrative, Phnom Penh 2019

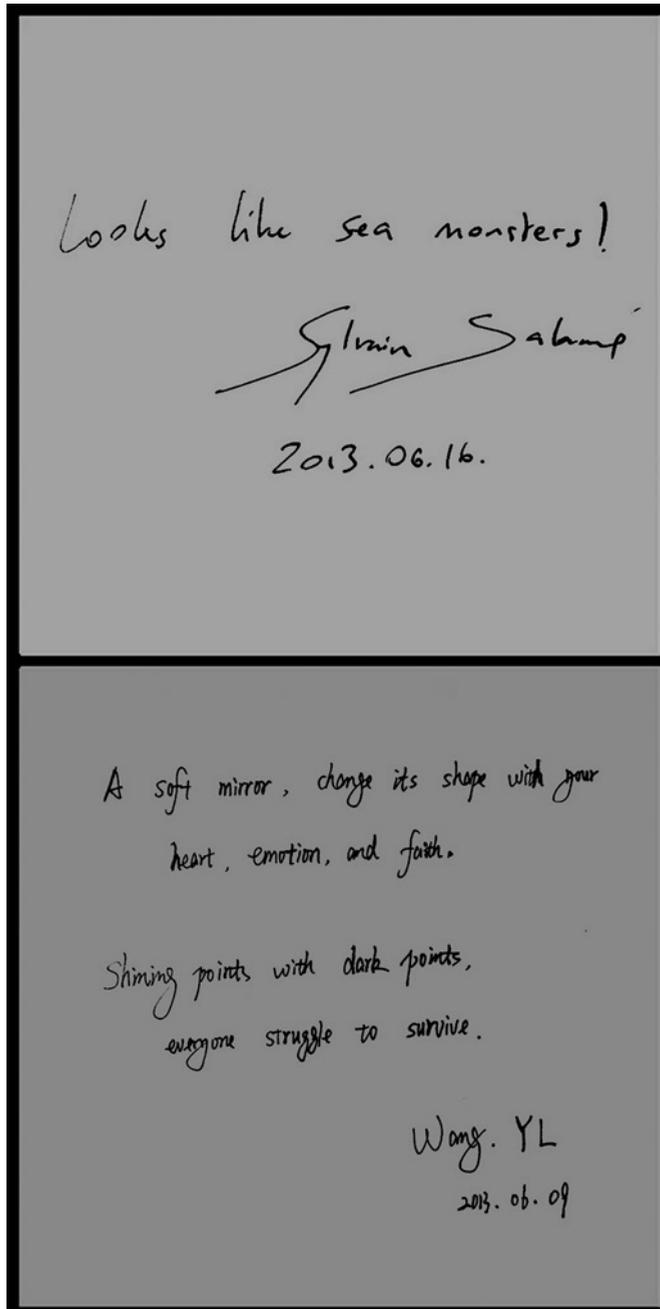


Fig. 3: Selected visitors' responses, Beijing 2013

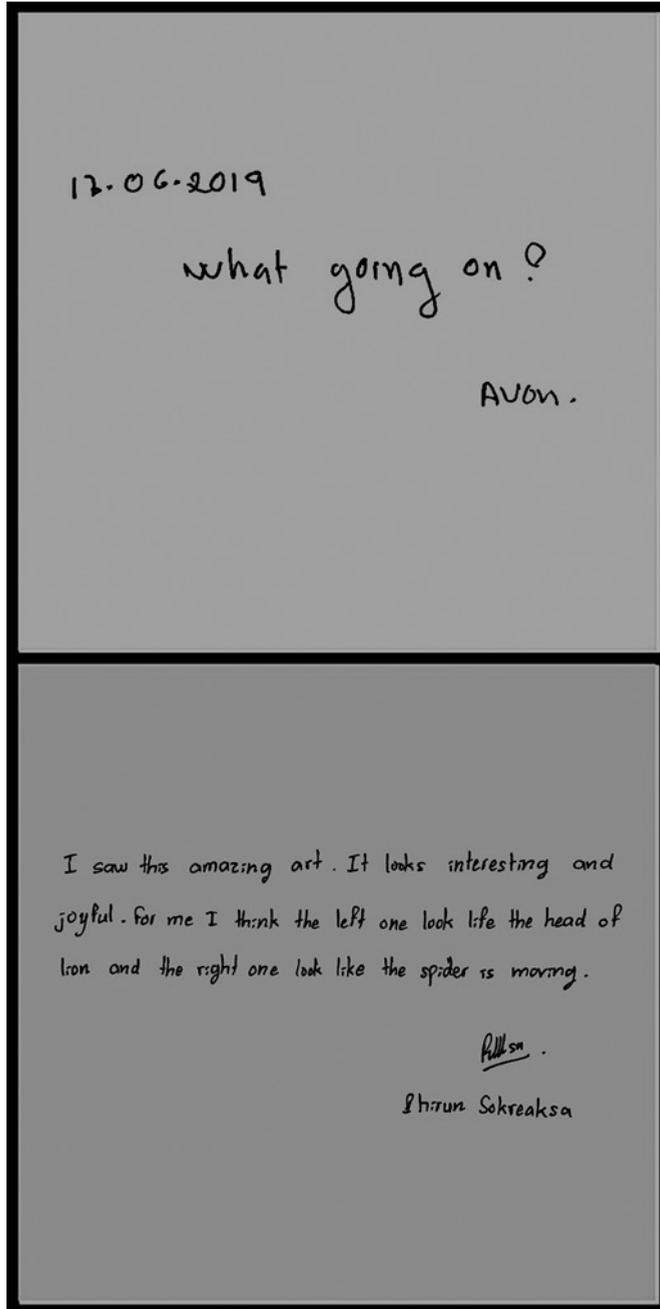


Fig. 4: Selected visitors' responses, TYPE I – Phnom Penh 2019

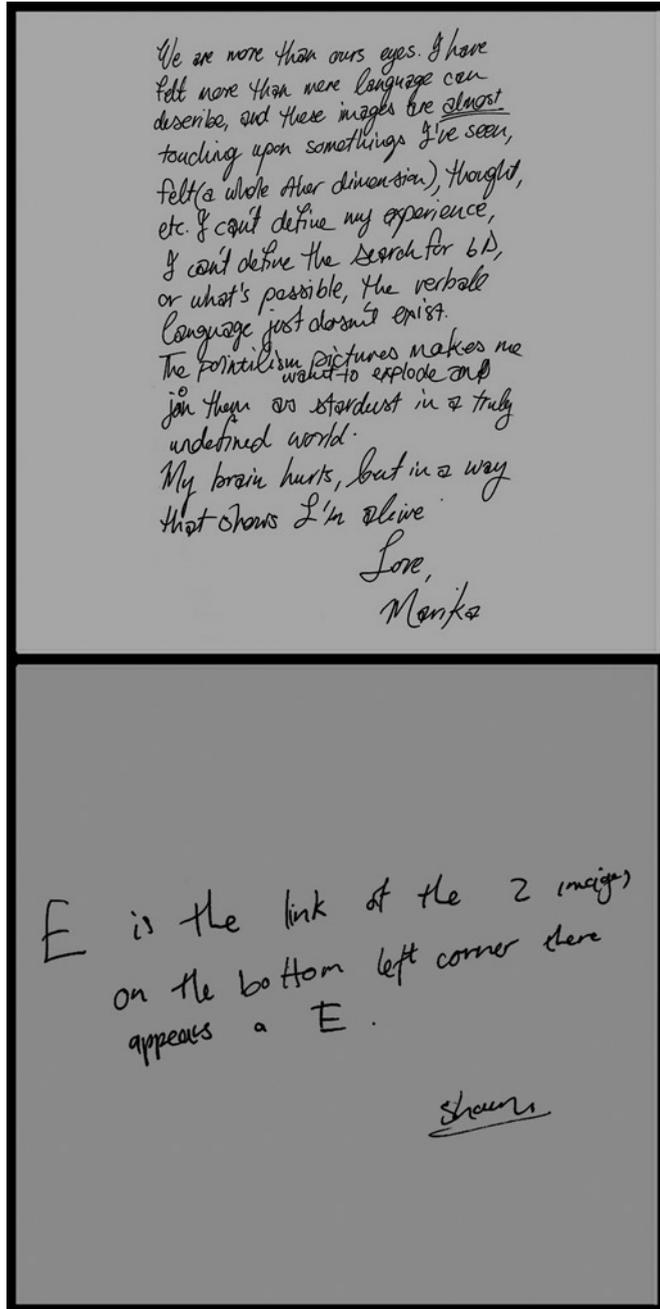


Fig. 5: Selected visitors' responses, Type II – Phnom Penh 2019

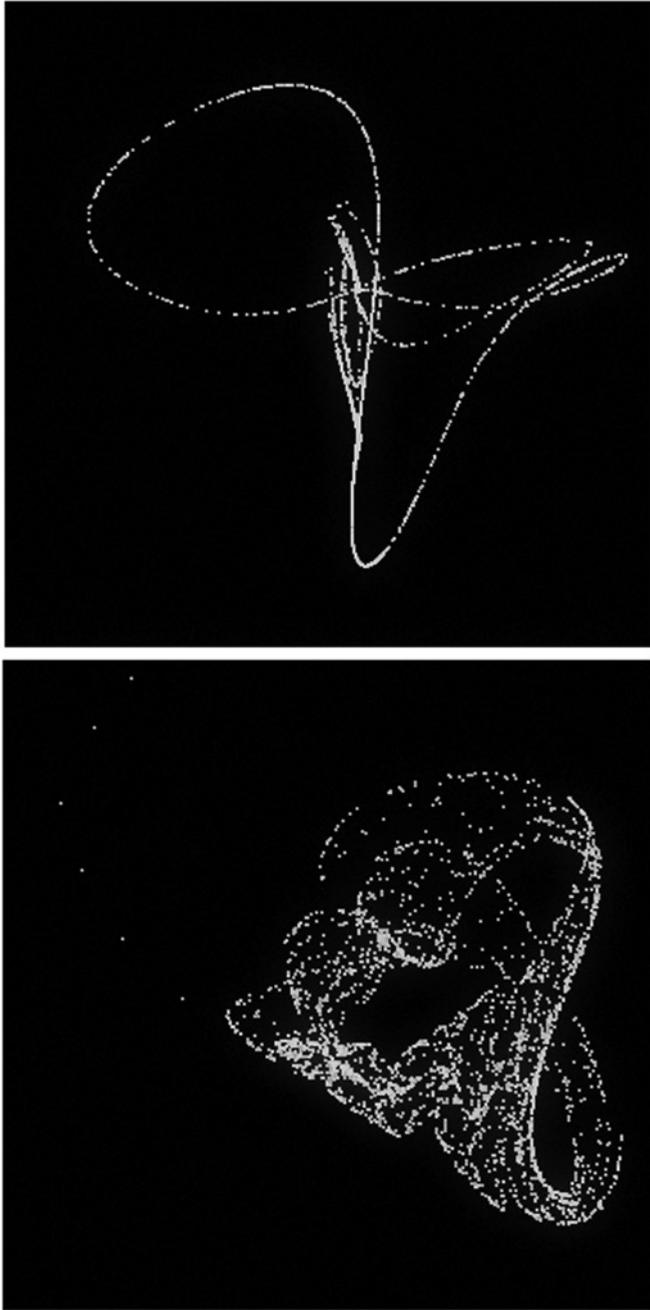


Fig. 6: Autogenerated Six-Dimensional (Similar) Strange Attractors Modified F10, PROGRESSIVE PROJECTIONS, Carlo Santoro, Phnom Penh 2019

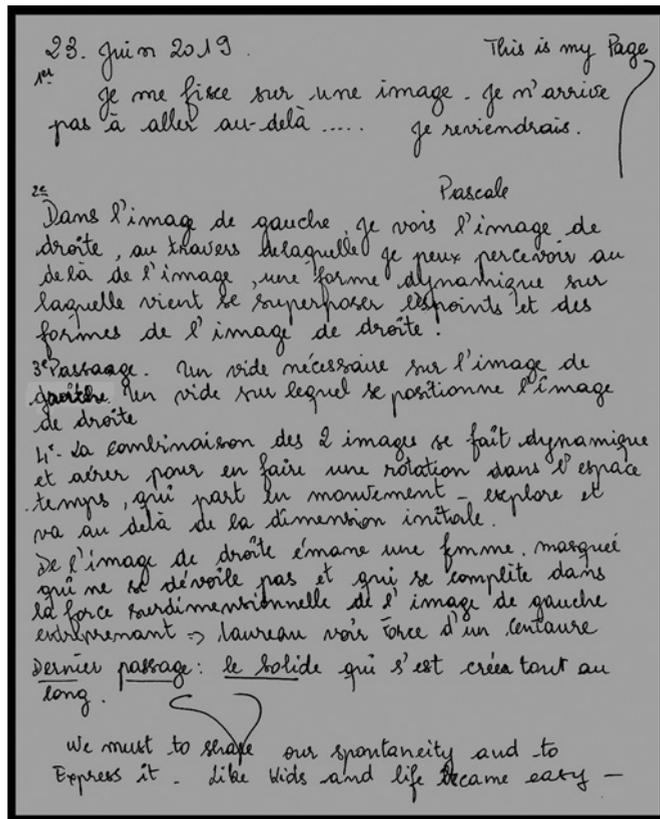


Fig. 7: THIS IS MY PAGE, Pascal, Phnom Penh 2013

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