

NEO-MAT-BUILDING

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ABSTRACT:

The evolutionary Mat-building, which is labeled Neo-Mat-building in this article, will present a very literal mat-like appearance in the field of both architecture and urbanism. The model of Neo-Mat is conceived as the integration of Nodes, Connections and Borders, interweaving the system of Neo-Mat-building. It would be rather like an urbanized unity concerning different scales, complexities and associations in terms of infrastructure, function-mixer in the field condition with the dynamic, plastic and changeable structure, than the individual building. Moreover, time is becoming the pivotal parameter for the rejuvenescence of Mat that, to some extent, Neo-Mat-building which is beyond architecture could be conceived as an in-between form of reality in favor of the space, form and human everyday life in the dimension of time. Upon this research, Yokohama Port Terminal by FOA and paradigm of SpaceFighter from MVRDV will elucidate the influence on the realm of Neo-Mat.

KEYWORDS: Neo-Mat-building, linkage, function-mixer, infrastructure, time

From the practice in Team 10 to various architectural and urban performances nowadays, the concept of Mat-building not only enlightened the work of 1960's, but also indicates an important aspect of legacy for contemporary urbanism nowadays. In the discourse of Mat-building, it seemed never be able to liberate itself from the constraints of structuralism in the last century, such as repetitive units, horizontal aggregation, less complexity and so on. Encountering the development of urbanism nowadays, the evolution of Mat-building is endowed with a new association between urbanism and architecture in different perspectives, and makes the border between architecture and urbanism become blurring. On this occasion, it is proved that different eras would entail the same concept different meanings. The liberation of Mat-building, which is labeled Neo-Mat-building in this article, will present a new Mat-like appearance between architecture and urbanism.

1 FROM MAT-BUILDING TO NEO-MAT-BUILDING

*“Mat-building can be said to epitomize the anonymous collectives; (...)based on interconnection, close-knit patterns of association, and possibility for growth, diminution, and change.”*¹ In articulating the idiosyncrasy of Mat-building, it is refreshing to reread Alison Smithson's article *How to Recognize and Read Mat-Building* (1947). Introduced by Alison Smithson, Mat-building provided an individual freedom of movement through the city by weaving close-knit patterns of association between objects in a dense internal language of circulation. It was conceived as a generator for individuals gaining new freedoms of action through a new order. As an attitude in architectural and urban design, Mat-building became visible for the first time with the actualization of Berlin Free University (Fig.1) (1963, by Candilis-Josic-Woods) and the Municipal Orphanage in Amsterdam (1960, by Aldo van Eyck). In the discourse of Mat-building, The Smithsons and their fellow Team 10 members abandoned the model of city as a compilation of individual buildings, and replaced it with the ideas such as 'stem', 'cluster' and so on, to consolidate the connotation of Mat-building.

The conception of the city from *stem* to *cluster* to *mat* had been addressed by Team 10 to delineate the architectural and urban systems as the assemblages of totality, in which way to develop the urbanized architecture or architectural urbanism. By now, many works proposed in different eras have been influenced by Mat-building in different shapes of collective, which could be interpreted in the same lineage of

¹ Smithson, Alison, “How to recognize and read MAT-BUILDING. Mainstream architecture as it developed towards the mat-building.” *Architectural Design*, No.9, 1974, pp573-590.

Mat-building. In the early time, *Agricultural City* by Kisho Kurokawa(1960) and Central Beheer Office Building by Herman Hertzberger (1972) were regarded as the early examples of mat-shaped and highly determined system with diverse functions. They were configured within the organized structure to organize the working cells into an open-ended unity. They not only had enriched the thesaurus of similar architectural precedents of workplace and collective space in general, but also uniquely represented the desires and aspirations of a generation. The development of Mat, La Villette Competition by Bernard Tschumi (1982), Nexus World Housing by OMA (1991), Yokohama Port Terminal by FOA(2002) and utopian ideogram of SpaceFighter by MVRDV(2007), for instance, triggered a further development of Mat-building with programs, forms and surfaces overlapping, and created an indeterminate, densely textured entity carrying invisible order by breaking the shape of cell units and the visible totality in the early epoch. It was obvious that after several decades, the Smithsons' Mat seemed to be newly developed without only by imitating or repeating, but by extending and developing propositions made by other like-minded practitioners. Along with the process of emancipation, the old Mat which was legible, orthodox and static, was disentangled and then rewoven into a new state of flux and multi-layered complexity. It is designated as *Neo-Mat-building* in this article not only describing the current situation of urbanized architecture, but also inspiring the further development of network system between the architecture and urbanism. In what follows, Yokohama Port Terminal and SpaceFighter will be read as the simultaneous moments of Neo-Mat performance to illustrate the contemporary concept.

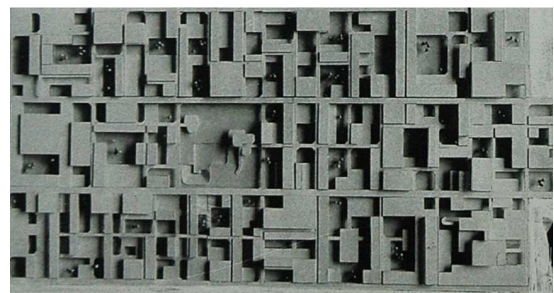


Figure 1. Mat-building of Berlin Free University(Resource: Candilis-Josic-Woods, Free University, Berlin)

2 THE FIELD OF NEO-MAT

In contrast to the Team 10's genealogy of mainstream Mat-building which is mainly generated from Cartesian system into a matted entity, Neo-Mat-building is rather an assemblage of aggregation, propagation and effects all over the place than a formal metaphor of the net-shaped mat. Field, pattern, or matrices could be described as an alternative to object-oriented architecture or mega-building. It contains non-physical or no matter points with functions, vectors and speeds interwoven. The conditions of Neo-Mat move from individuals to collectives, from objects to fields, and from static to dynamic. It stands in the field of neither architecture nor urbanism, but the boundary of in-between. The complete examination of Neo-Mat's implication between architecture and urbanism would necessarily reflect the complex and dynamic behaviors of users and occupiers, and then speculate on new methodologies to model program and space. Thus, Neo-Mat-building could be conceived as an 'in-between' condition or a 'third place' which "*overcome space and time fixations...(and) transpose insignificant singularities into meaningful complexities...*"²

The delineation of relations between differences within the distribution and transmission of Neo-Mat refers to nonlinear dynamics. This formal and spatial matrix is capable of combining diverse elements while maintaining the identity of each, and the loose configuration and aggregation give rise to the characteristic of porosity and interconnectivity. Defined by rather intricate local connections, interval, and repletion than the overarching geometrical entities of the early Mat, Neo-Mat-building is a large system made up of geogenic and anthropogenic subsystems which constructs an all-encompassing multi-dimensional network with diverse social and physical links, and continues a push for a shift in architectural and urban design from static imagery to organization, temporality and transition. Beside the anti-figural, anti-representational and anti-monumental traits, Neo-Mat-building creates an open field where all the possible events might take place within an invisible scale threshold.

Although the high density of Neo-Mat-building requires delicate interplay between variations and repetitions, it is no longer a mechanical and two-dimension duplication, but the extension and flow of the transfiguration of the same genies through multi-dimensional spatio-temporal. The massive flow of people, goods and information endows Neo-Mat with the trend of movement that the reciprocity alone the interaction

² Moholy-Nagy, Laszlo, *Vision in Motion*, Chicago, Paul Theobald & Co, 1965, pp.210

leads to the possibilities for growth, diminution and change over time. The conventional plan or section of flexible Neo-Mat configurations would be replaced by the production of weaving, warping, folding, interlacing and knotting together. It is governed by connections and thresholds rather than by geometric boundaries. The ultimate objective of Neo-Mat-building is more than the total integration of building, tissue and landscape. It intensifies the relationship of objects between society and culture by emphasizing process and organization over objects.

3 THE MODEL OF NEO-MAT

Within the model of Neo-Mat-building, the elements embedded with topological transmutation could possibly be epitomized as *Nodes*, *Borders* and *Linkages*, which are inspired by 'Play Brubeck' (Fig 2) by the Smithsons, to define an invisible and indeterminate structure of system (Fig 3):

Nodes are assembling locations determined by different high densities of behaviors, needs and information. Typically the identification of nodes requires a threshold size requirement and a procedure for bounding nodes. The density of the nodes is a gauge for the quantification and evaluation of clustering and relations. The relative locations large and small centers appear to be relatively unconstrained. The relations between objects and objects, or objects and territory can feature the different existence of different density.

Borders are the spatial, temporal or organizational demarcation of the Neo-Mat system. They are also viewed as the perimeter of the scale of network. The degree of openness of borders is measured by comparing the transborder flows to internal flows, helping to determine the rate of change of the system as a whole and spatial pattern of change across the system. The overlapping caused by the openness of the borders might ultimately lead to the physical and non-physical, visible and invisible borders integrated together into a whole totality.

Linkages are concerned with the relationship and usually described in terms of the connections and flows of behaviors, needs and information between nodes and borders calling for labyrinthine clarity³. The linkages between nodes are determinate and direct, while that between borders appear as the indeterminate and indirect interstice. These different shapes of linkages provide the means by which change at one location can be connected to other nodes and borders in the Neo-Mat system on different levels. The strength of a

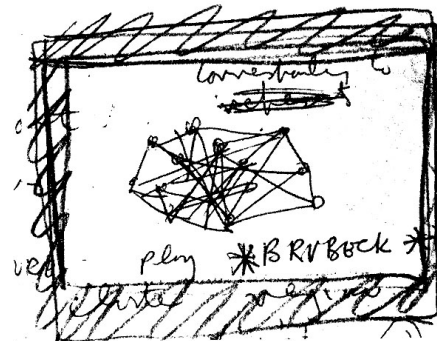


Figure 2. *Play Brubeck* by the Smithsons (Resource: Alison of Smithson (1968))

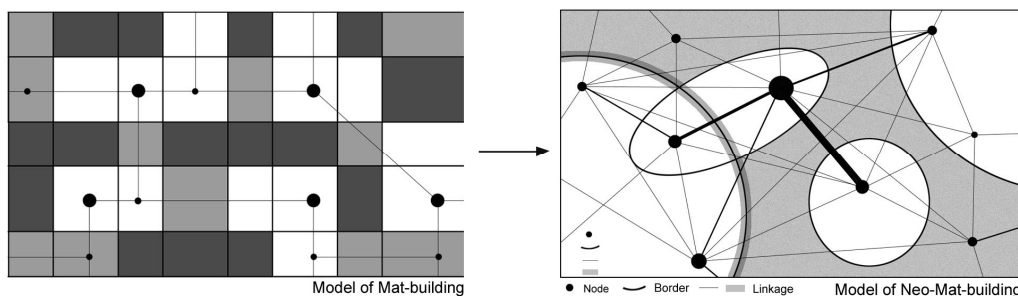


Figure 3. The interconnections within Mat-building is neighboring and 2D influence, while that in Neo-Mat-building is transborder and over 2D influence. The weighting of linkage in Neo-Mat is different due to the significance of node and borders.

linkage is positively related to the size of both origin and destination nodes, as well as to the distance and

³ Aldo van Eyck introduced the notion of *labyrinthine clarity* in Team 10, described as the tendency towards Mat-building by the Smithsons.

compatibility between borders. Given the considerable mat size variations, the size distribution of intermodal linkages will vary and lead to the different mat matrices. Within Neo-Mat system, a fundamental integration is defined as the sum of all flows in a whole. Transportation and communication might help to overcome the friction of distance.

Comparing to the early Mat of Berlin Free University (Fig.1, 3), the mode of Neo-Mat, such as Yokohama Port Terminal, elucidates a different mechanism of association. The flexible linkage web between individual and collective presents a non-standard and open-ended system. It is rather a 4-D network (3-D+ time dimension) than the 2-D connection. The mobility of space, circulation, surface, material, layers etc. connects the association of different concrete or abstract nodes (totality, system of circulation, function of terminal, spatial experience, etc.) and borders (between relatively static and dynamic, inside and outside, individual and collective, order and labyrinth, architecture and landscape etc.) The boundary of in-between becomes obscure in terms of the different scale and emphasis of focus and criteria. Sometimes, in fact, the assemblage of Nodes, Borders and Linkages is possibly conceived as another Node of upper level. The hierarchy of Neo-Mat enriches the body of Neo-mat and bridges the gaps between different levels. Besides the formal performance, all three elements of Neo-Mat-building are nevertheless fundamentally linked to the social, cultural, economic and political process and structures within where the universal association is embedded and enacted. The structure of Neo-Mat provides a 'virtual' paradigm allowing for the ideal 'urban society'. Through three types of complexity: orderly, disorganized and organized complexity, SpaceFighter by MVRDV was conceived as the combination of individual actions generating outcomes which can be perceived from the perspective as a whole⁴. As the comments by Rem Koolhaas in his work S,M,L,XL, The 'real' building or the 'real' city no longer existed. '*Now we are left without urbanism, only architecture, ever more architecture.*'

4 NEO-MAT PERFORMANCE

Given the matrix of nodes, Borders and Linkages, Neo-Mat-building is conceived as an agency of dynamic, indeterminate, and spatial matrix instead of a regular Cartesian grid, thus to depict the condition of future architecture and urbanism. Going beyond stylistic or formal issues, Neo-Mat-building plays the role of material practice dedicated to concrete proposals and realistic strategies of implementation concerned with the assemblage of different scales of behaviors, flow of information, and the topological transformation over time. It is always designated as the *Function-mixer* and *Infrastructure* in the Field condition to make a return to instrumentality and a move away from the representational imperative in architecture. The performance of functional practice organizes and transforms the aggregate of behaviors, material, energy and resources, and deploys an open catalog of techniques without preconceived formal ends. The aim of function-mixer is not an attempt at controlling or predetermining the meaning of physical material. It goes beyond the shackles of material to pay more attention to the effects of signifying practice on behavior and association. It not only expresses the form between solid and void, but also examines an innovational system of condense, transform, and the materialize concept. The performance of Neo-Mat is more concerned with the actualization of virtual than with the realization of the possible. Neo-Mat responds to the recurrent demands for a certain indeterminateness of scale and figure, for flexibility of use and for a mixture of function, in response to the increasing invasive character of architecture with regard to the city and the landscape. From concrete material to ephemeral signs, interaction becomes the essence of the neo-Mat-building either being the function-mixer or acting as the infrastructure by means of material practice.

Within the new Function-mixer, the extended concept of function and the diversified methods of organization articulate a wholly practice of function arrangement. Instead of the conventional functional concept in Athens Chapter and the 'scale of association' by Team 10, Neo-Mat fundamentally conveys both concrete (work, living, transportation, recreation etc.) and abstract (perceptions, memories, temporalities, etc.) elements into the universal category of functions, and then constructs the network of mixer to explain the performance of architecture and urbanism. Neo-Mat-building is not supported to work so much to provide specific building on given sites, but to construct the site itself with all the functions mixed. From geographical occupation to spatial arrangement, from realistic to virtual, and from order to labyrinth, the mix of function (residential subdivisions, office parks, commercial malls, airports, skywalks, high-rise sections,

⁴ MVRDV, *Emergent urbanism in SpaceFighter, the revolutionary city*. pp.11

freeways, etc.) need to be contemplated in terms of juxtaposition and interaction of sociological, ecological, economical and spatial factors, which are akin to the nodes of Neo-Mat, and interlinked by means of weighting consideration. In order to explore the latent order and hidden structure of network, Neo-Mat-building acts as a linkage machine, interweaving the characteristics of flow, ambiguity, multi-overlapped, and changes within a non-standard system. The scale and significance of Nodes in this machine articulates the functional weighting via the reorganization of density and connection in-between, and generates the new mix-functional concept between objective and subjective.

Acting as a function-mixer, Yokohama Port Terminal attempts to refocus the life of city within the space of intense movement in a dynamic-oriented perspective, and casts the spaces of unimpeded flow as liberating and productive functions for experiencing the space. The space shaped by circulation entailed a 'no-return diagram' (Fig.4.5) creates a 'field of movement with no structural orientation.' The linkage of mobility weaves the seamless surface interaction from inside to outside and provides a function-mixer dominated by the flow of people, cars, ships, and information. The fast and slow functions are filtered in relation to the transport machine and

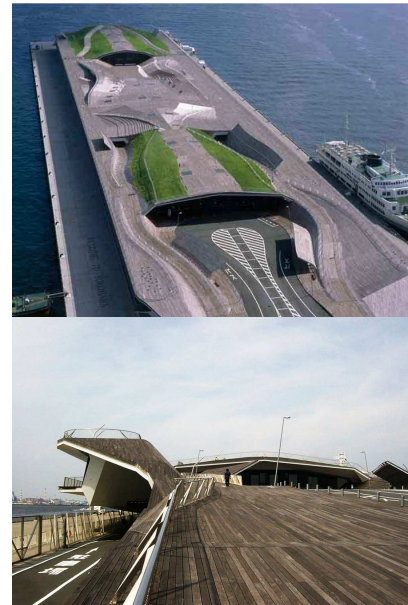


Figure 4. FOA, Yokohama Port Terminal, 2002

POINT OF NO RETURN CIRCULATION DIAGRAM

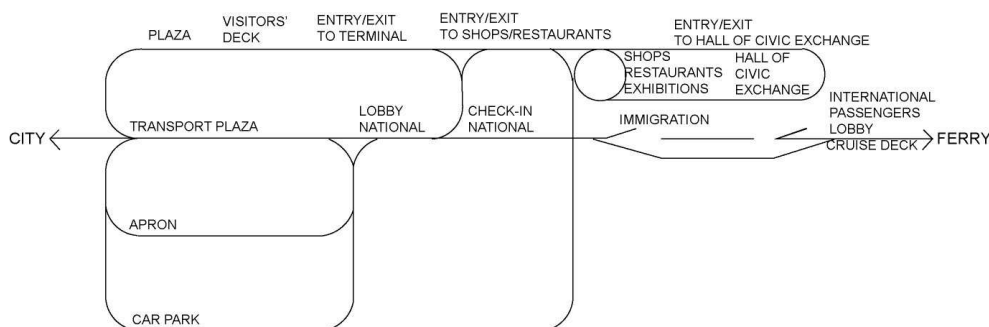


Figure 5. No-return diagram (Resource: Adam Rohaly, Yokohama Port Terminal, Foreign Office Architects.)

simultaneously arranged together within a whole totality. In the similar manner, the SpaceFighter provides an alternative as a system focusing on production of region (Fig 6.7). Due to the ever-increasing speed of change and complexity in both local field and global level, feedback loops of information from the environment (nature and artificial) are transformed into the data of 'emergent urbanism' in favor of the 'shrinking of world' and 'blurring of boundaries'. The data of functions interconnected in this device are encouraged to move from static to progressive matrix, and collected to model the complexity of urbanism by means of rapid adaption, mutation and exploitation. Dynamic interaction of parts, participant actors and relations in-between would be felt at various hierarchical levels. The ability of enabling municipalities, inhabitant groups and planners to compose an optimized and mixed region would be predicted in this device.

Beyond the function of system, Neo-Mat aims to produce effects outside itself and describe an active program, which is opposed to the 'representative' architecture, to represent urban chaos, deconstruction, cybernetics, biology, consumerism, and dematerialization of the world. The role of architect is dissipated to become the information collector for vast documents of abstraction- "building and tax codes, market projections and interest rates, ordinances and zoning laws, actuarial tables and demographic statistics"- leading to the metropolis as the site for a collective architecture, while viewing the city through the lens of infrastructure. As the Smithsons proposed in Team 10 primer, *'the time has come to approach architecture*

*urbanistically and urbanism architecturally.*⁵ The discussion between architecture and urbanism by Team 10 casts light on the Neo-Mat-building by the appropriation of an infrastructural strategy. Opposite to the vision of Constant's New Babylon, an interconnected level floating above the earth, and Friedman's super-construction above Paris, Neo-Mat moves away from individual expression toward collective enunciation by the fixing of service, access and structure (bottom-up) paralleling with the establishment rules and codes (top-down). The integration of bottom-up and top-down strategies might be helpful for the interconnection between the existence and the new intervention. Neo-Mat acts as the infrastructure accommodating local contingency while maintaining overall continuity. The particular condition is given by both site and designers pragmatically to specify what must be fixed and what is subject



Figure 6. SpaceFighter, city function and scale in block (Resource: *Spacefighter*, pp280)

to change. The dynamic system is capable of organizing and managing complex systems of flow, movement and exchange, that free space for the further unanticipated development would be occupied and left over and over between the solid and void. The changes of scale and association tend to produce the field condition of infrastructure in respond to incremental adjustments and changing environmental condition. The appropriation of infrastructural strategies for Neo-Mat attempts to catalyze the transformation toward social, cultural, ecological and artistic ends, and the overlapping networks of Neo-Mat could be perceived as social, cultural or landscape infrastructure in different perspectives. The long-term implementation depending on short-term initiatives might be responsive and allowing for the defined or undefined open-ended performance within Neo-Mat system.



Figure 7. SpaceFighter, social groups interacting in many ways (Resource: *Spacefighter*, pp237)

As to the infrastructural characteristic of Yokohama Port Terminal, the concerning of flow constructs a dynamic structure in terms of mobility, landscape and social potential. A flow Neo-Mat posits reconsideration of intensity, flexibility, diversity and fluctuation of usage within the sites and their relations to wider networks of activity. The program was given a network-bound rather than site-bound reading. It aimed to replace the formal exploration with a process of spatial optimization driven by various performance criteria. FOA's approach deliberately avoided articulate forms for its effects on usage and flow, and elucidated that: *'our preference would be not to be place signage in a building, but to let the space index the uses and explain its organization; let the space contain and explain its internal codes rather than indexing it. Or either make the space so neutral that inscription is absolutely necessary in order to use the space, and it becomes part of material, like in a ship or in a place, like in a highway.'*⁶ In discourse of infrastructure, there was a tension in this flow-Mat, that the connection between flow and form suggested another material practice and opened up the questions about normalizing the potential of the interstitial towards self-programming. Moreover, by squeezing everything into one form of data or another, SpaceFighter made world became smaller and more within our grasp. The complexity of system was allowed for and simplified into the practice of design. In response to modern's life complexity, a balance between stifling order and destructive chaos was achieved by building connections and detachments between parts of system. Comparing to Yokohama Port Terminal which was mainly concerned with a city infrastructure, SpaceFighter was even more conceived as a cultural and societal infrastructure dealing with the contemporary culture and always projecting problems and possible solutions into present and distant future.

5 TIME BASED NEO-MAT-BUILDING

⁵ *Team 10 Primer*, edited by Alison Smithson, Cambridge, MA: MIT Press, 1968, pp.73

⁶ Foreign Office Architect (FOA), (2002) *The Yokohama project*, Barcelona.

In *Matter and Memory* (1911), Henri Bergson introduced that time is intertwined with an experience of being where past, present and future merge, and only can be understood in relation to a process or a phenomenon. Neo-Mat-building thus liberates from the embrace of the present and experiences the slow, healing flow of time to convey the history of the body's encounter with the outside world through their different materiality, surfaces and articulations of linkages. Time based Neo-Mat is the instrument and a museum of time, which enable us to see the history, understand the present, and participate in time cycles surpassing individual life in virtual future on several levels: Firstly, experiencing the time is akin to experiencing the space, and vice versa. Secondly, the structure of Neo-Mat (long-term instrument) is stable and engaged with the constant change of function (short-term factors). Thirdly, interaction between borders and nodes visualizes the abstract time via ephemeral moment.

David Harvey stated that a 'space-time compression' in new real and virtual networks increases the pace of mobility, diminishing our perception of distance while enhancing our experience.⁷ The simultaneity of process is brought up between living body and the things that happen, and experiences the duration of time in the process of spatial experience. To create and experience the continuity of time, Yokohama's Neo-Mat is supported by the continuous spatial flowing and folds through time. The direct and indirect linkage in-between (waiting and playing, inside and outside, local and foreigner etc.) creates an infinite variety of ambience, which will be regularly and consciously changed by constant movement. The borders in this Neo-Mat are blurred with the passage of time, while the linkage becomes stronger over time. The fusion of space and time makes the space perceived by the body moving through experience, and creates entity from inside out. The difference between the objectivity and subjectivity of time, which is argued by Bergson in *Matter and Memory* seems to be balanced in this entity through the spatial flow. What pertains to mind, the abstract action, is as important as what pertains to the body, the concrete experience in the matrix of Neo-Mat. The complexity of contemporary city is understood by designers to commit an intervention as chaos, randomness and indeterminacy through the duration of experiencing.

In representing function-mixer and diversified infrastructure, the changeable and mixed functions (short-term) within Neo-Mat are ephemeral relative to structure (long-term). Nevertheless, the structure in Neo-Mat is not eternal. To what extent Changing functions within fixed structure is applicable to people would determine the configuration of Neo-Mat towards different structural systems. The change of function leads to the transformation of interconnection, and then brings up the simultaneous alternation of structure. The non-synchronous and mutual influence between nodes, borders and linkages (Fig.8) ultimately gives rise to the topological transformation of structure, in which the ephemeral objects (changeable function and spatial experience etc.) are built as a permanent entity. The contemporary interpretation of space and time in connection with mixing functions in Yokohama Port Terminal put the approaches of perceptions, occupation and appropriation into realization by means of some fundamental trajectories such as spirals, intertwinements, curls or sparkles. The functions of terminal are interwoven by the spirit of flow, which passes through system from inside to outside instantly. The relationship with this gene as fundamental information would be interesting and capable of provoking complex interactions from present to future by the users. Configuration of flow permits a growth and virtual mutation of space-function in combinatory of an open time and experience.

Bergson's duration of time suggests the passage of time, in which consciousness plays a leading role between space and time that people could feel the time not only in terms of spatial interactions, but also happening and reappearance of events. To experience time and make ephemeral moment visible, the model of Neo-Mat forges a strong relationship with past and future to usher the new life at present. Neo-Mat seeks

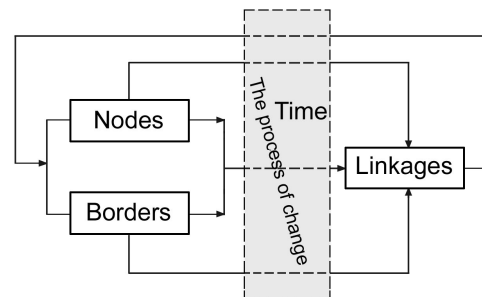


Figure 8. the interconnection within time based Neo-Mat

⁷ David Harvey, *The condition of postmodernity, an Enquiry into the Origins of cultural Changes*. Malden, Mass, Blackwell, 1990, pp.201-323.

to perform as the 'filter' to arrange the information from history and lead towards the discovery of new life which could in turn react on growth of Neo-Mat. Perceived in the lineage of New Babylon or Unitary Urbanism proposed by Constant, Neo-Mat emerges as a constantly changeable activity, a deliberate intervention in the praxis of daily life and environment at present. History and future is woven at present to determine the daily life today and foreseeable future. Time is no more solid and stagnant categories, but open and manageable coordinates, compressible and expandable in new unexpected combinations. Re-encountering the history at present would lead to the reappearance and new combination of information in the past, by which means makes the hidden 'now' suddenly visible.

In the term of time, Yokohama Port Terminal paid more attention on the rapid and the duration of flow, while SpaceFighter is a diagram managing to model the complexity of time-based competitive urban factors by means of reflecting "*imaginable, forecasted, interactive urban processes, actions and reactions*", and comparing series of selected and possible projective simulations, results and outcomes of urbanistic chain reactions from historical analysis to digital prediction on evolutionary city.

6 NEO-MAT BEYOND BUILDING

Within a systematic field, Neo-Mat plays as infrastructural, operational performance rather than the formal and representational architecture. It is no more the solid geometric shape in space but the intuitional matrix of interrelated endless networks "beyond building" and "extremely diagrammatic". It acts as natural production entailed liberation of melting, transforming, adapting, eroding and reproducing through spontaneous autocatalysis, overcoming the orthodox of "putting horizontal things on top of vertical ones." Opposite to the tectonic vision of architecture as the legible sign of construction, Neo-Mat-building signifies a hybrid of the early neo-avant-garde investigation of signifying regimes with the later pursuit of no scales, no typology and no style.

In understanding of Neo-Mat-building, it is not only the entity of building, but rather the new lifestyle and social reality. Our activities, which mostly take place in terms of different places and time, make this a necessity. It should be more applicable, lively, joyful, hybrid and 'real' than sculptural, serious, rhetorical and isomorphic building in mechanical age. The interweaving of human behavior, races and social interaction plays the crucial role of paradox instead of orthodox. The distinctions between objective and subjective, static and change, separated and connected are blur and repositioned by renewing the essence of the form, use and interconnection between sensation and phenomenon. Yokohama Port Terminal is thus combination reconsidering the occupation and appropriation of public space. It was described as a landscape of 'fast' and 'slow' spaces, which was differently portrayed for various festivals and events from inside out. In this Neo-Mat, distinction between garden space and waiting areas was minimized that neither wall nor gate, but spatial flow was considered as the element guiding the occupation and appropriation.

Beyond the architecturalized urbanism or urbanized architecture, Neo-Mat-building constructs a new device of discipline and order. The liberation of Mat-building in terms of structure, roof, space and lifestyle is characterized as extensive and intensive system that Neo-Mat is organized as a radical, discontinuous, and distributed 'sprawl' described by Albert Pope: '*...this apparent unity of form is extraordinary given the present conception of contemporary urban development as so much uncontrolled and disorganized "sprawl." That the majority of urban elements share a common order across a broad range of scales suggests a totality which remains completely obscure to popular perceptions of the city. The implications of such "transparent" forms of organization are, to say the least, socially and politically suspect...*'⁸ A range of new terms associated with Neo-Mat-building leave far behind the "building", and emerged by the names landscape-Mat, infrastructure-Mat or social-Mat to fix the connection between architecture and urbanism.

In some circumstance, Neo-Mat-building will possible encounter the critique from the economic and social perspective, such as the lack of the flexibility due to the mega-structure, the huge investment on fundamental structure, the disorder of social diversity in totality, or the abuse of social space, and so on. However, instead of a stable and stereotyped entity, the concept of Neo-Mat-building covers from a regional urban system or the cluster in mega-structure to the small scale construction with a comprehensive system, from the visible object on the ground to the interaction between visible and virtual. The local and

⁸ Albert Pope, *Ladders*. New York: Princeton Architectural Press, 1996, pp. 222-224

informational technologies play the same role in the development of Neo-Mat, by which means to keep the individual identity deriving from the same model. The efficiency of interconnection, the totalitarianism of difference, and the perception of everyday culture and lifestyle might be contemplated in an integrative way as the multitude of neoliberalism.

Thus, what is the relation between a given process (set of actions and reactions) and a desired outcome (a goal)? According to the fact of connecting large-scale or small-scale networks with the networks in the body and between bodies, understanding, repositioning and even encapsulating could be possible seen as an attempt for intelligent 'space management' and a method to update the knowledge on the growing complexity of large scale urban processes. Neo-Mat is like temperament and identity as emergent properties that "*matter, environment, and emergent consciousness all connect across to something nearby, and ultimately to everything else, to give a political and ethical dimension to the thinking.*"⁹

7 CONCLUSION

In general, Neo-Mat-building, the rejuvenescence of Mat-building, is proposed as one of the most stimulating and ambiguous paradigms of this century in terms of network and global communication. In an attempt to go beyond the so-called 'general geometric form', architects continue to seek solutions that could "make room for the active unfolding of urban life without completely renouncing the responsibility of the architect to provide a certain kind of order." The paradigm of Neo-Mat through rhetoric of interior linkages, environmental sustainability and provision of infrastructural amenities makes open debate on their real aims and consequences.

To be a heuristic pattern taking shape through the interaction between architecture, urbanism and new born science of communication, Neo-Mat-building is referred to several major types of points below:

- 1) The Linkages between Nodes and borders interweave the structure of Neo-Mat, indicating a labyrinthine clarity directly and indirectly while modeling the flexible, changeable and self-sufficient system.
- 2) Playing the role of function-mixer and diversified infrastructure, Neo-Mat performs between subjective and objective deriving from the liberation of ideology, space, structure and behavior, representing urban chaos, deconstruction, cybernetics, indetermination and dematerialization of the world.
- 3) Experiencing the time in Neo-Mat is engaged with the relatively stable structure of Neo-Mat (long-term instrument) and the constant change of function (short-term factors), in which way visualizes the abstract time between borders and nodes in the combination of past, present and future.
- 4) Beyond the architecture, Neo-Mat-building acts as a new lifestyle and social reality fixing the connection between architecture and urbanism with the designation of landscape-Mat, infrastructure-Mat and interior-Mat from inside out.

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