## **Table of Contents**

_	rsis of Support Strategies and Management arch Work Report	1
	Cities as Mediators of Architectural Interiority	3
	Local Heritage-Local Authority: Managing in the Middle of Nowhere The Increasing Importance of Advanced Building Simulations in a New	4
	Building Design Paradigm	5
Creative Work Utilization Report		6
	Packaging Research and Design Development	7
	Econo Thailand Office and Factory Willow 49	8 9
	The White House Cafe Thai Beverage Training Center	10 11
	Dermatological and Aesthetic Center for Serirak Hospital	12
Qualif	fying Creative Works	
	Peer Review Committee Qualified Creative Works  Econo Thailand Office and Factory Willow 49 Pattaya Residence The White House Cafe Media Acoustics Thai Beverage Training Center Dermatology and Aesthetic Center Serirak Hospital Prachasongkroa Kindergarten Interactive Features for BCC	14

Inspirational Hall

**Research and Creative Work Development Report 2013** 

June 2013 - June 2014

Montfort del Rosario SRSC School of Architecture and Design SRSC SCHOOL RESEARCH SUPPORT COMMITTEE

#### June 2014 - June 2015 Recommedations

SRSC will improve the qualifying system and mechanism to meet with international standard in terms of peer reviewing and dissemination.

Also, research through design approach should be further supported in order to encourage faculty members to conduct research.

The new committee member for SRSC should be assigned to be resposible for:
Managing of weblog contents.
Organizing of Design
Literacy Forum II and well as the annual forum and peer review process.

#### **Analysis of Support Strategies and Management**

This year, SRSC has completed all the strategies specified in the plan. Initiate Web-based journal as a mechanism for research and creative work dissemination and knowledge management.

The committee has observed results as follows:

#### **Accomplishments**

As the School redefined research as building and sharing of knowledge, the newfound strength was in creative work produced by faculty members. Most faculty members are licensed practicing professionals with connections with the industry and have continuously contribute to the development of architecture and design industry in the form of creative works.

With this important contribution to architecture and design industry through creative works, the School recognizes the potential of sharing of this tacit knowledge with the society at large. Therefore, the School Research Support Committee (SRSC) has established a disseminating channel in the form of weblog and annual forum, which aimed at qualifying, analyzing, and synthesizing creative works of faculty members in order to make information available for the public.

#### **Management Problems**

Currently the dissemination channel comprising of a weblog and annual forum is limited to faculty members in the School. Therefore, in order to make this contribution more significant, SRSC aims to extend the invitation to other universities.

#### Innovation

Architecture and design discipline is unique, as it needs contributions from professional practice in the form of tacit knowledge to build explicit knowledge. However, the transferring is complicated as the two end of the spectrum continues to maintain a wide gap. Therefore, SRSC has formed a strategy to bridge the gap by initiating collaboration between architecture and design professionals with theorists in the field. Through colloquium-style discussion, a new form of explicit knowledge anchored in tacit knowledge is created. This new form of knowledge building approach is also currently being investigated by scholars in the field known as "Research through Design" approach. SRSC strives to contribute to this new direction in order to be a part of knowledge building mechanism for the architecture and design discipline in Thailand.

## **Research Work Report**

This year two faculty members have presented research paper at international conference and published in peer-reviewed proceeding.



## ARCHITECTURE\_MPS

A JOURNAL OF ARCHITECTURE MEDIA POLITICS SOCIETY

City as Mediator of Architectural Interiority

Assistant Professor Chutarat Laomanacharoen

Montfort del Rosario School of Architecture and Design Assumption University

Montfort del Rosario SRSC School of Architecture and Design SCHOOL RESEARCH SUPPORT COMMITTEE

SUBMISSIONS PEOPLE FULLTEXT BACKISSUES HOST PROJECT ABOUT CONTACT HOME HOUSING-CRITICAL FUTURES H-GFL RESOURCE REPOSITORY CONFERENCE(S)



#### **Abstracts**

Cities, products of the higher form of civilization, are where people gather to conduct sophisticated activities apart from those related to necessities of life. A Conglomeration of residential, business, commercial, cultural and industrial areas is the core element that propels most cities. Architectural wonders empower and attract more and more business to the city. Throughout history, cities have taken various forms from ancient cities to mediaeval cities to industrial cities and modern cities. Within these urban shells, human interiority unveiled and manifested in various forms such as art, music, literature, as well as architectural interiority. A close inspection revealed that these manifestations were not necessarily mutual with the urban shells that contained them. Gothic Revival and Arts and Crafts interiors were refuge from the harshness of industrial cities. Adolf Loos's interiors exemplified how urbanites should create their own private domain and turn their backs on the pretentious urban sphere. The most extreme urban escapism was Josef Hoffmann's geometrical saturated design of the Purkersdorf Sanatorium—a place to cure urban related disease known as neurasthenia. This radical detachment from the exteriority or the architecture was an important departure point in the development of architectural interiority. Since then, architectural interiority evolved within its own paradigm, which gave rise to many significant theories. Observably, the more advanced the city; the more 'need to escape' was reflected in the interior of the building. Through hermeneutic phenomenological approach, this paper aims to explore the relations between urban forms and architectural interiority traits at the turn of the 19th century to understand the important phenomena that has fueled significant theoretical development in architectural interiority as well as to amplify the roles of the city in mediating human interiority in the hope for cities where urbanites no longer need to escape.

 $\mathcal{C}$ 

THE INCREASING IMPORTANCE
OF ADVANCED BUILDING SIMULATIONS IN A NEW BUILDING DESIGN PARADIGM

Manfred J. Zapka, Ph.D, P.E., LEED AP & Sanphawat Jatupatwarangkul, D.Arch, Post-Doc Fellows

Montfort Del Rosario School of Architecture and Design Assumption University

Unpulished Conference Paper

**Abstracts** 

Montfort del Rosario SRSC School of Architecture and Design SCHOOL RESEARCH SUPPORT COMMITTEE

This paper presents and discusses the increasing importance of advanced building simulations in the design of high performance buildings. A changing building design industry increasingly requires simulations to achieve high energy efficiency and sustainability, while safeguarding occupant comfort, for the built environment. The paper introduces two main numerical design tools, energy simulations (ES) and computational fluid dynamics (CFD). Much of the building industry and even many academic architecture programs have not vet embraced advanced simulations as indispensable tools of the design process and building operation, as well as an important educational focus for the next generation of architects. The paper discusses how a successful implementation of the new design paradigms based on advanced simulation tools in academia and the building industry are hampered by technology and human barriers. The paper proposes several measures to successful overcome these barriers. Several important of application of advanced simulation are discussed such as building energy consumtion; natural ventilation, dispersion of pollutants in and around buildings and occupant comfort performance.

#### ICOMOS THAILAND INTERNATION-AL CONFERENCE 2013

Faculty of Architecture, Chiangmai University. October 15-16, 2013. 41.

LOCAL HERITAGE-LOCAL AU-THORITY: MANAGING IN THE MID-DLE OF NOWHERE

Patiphol Yodsurang

Montfort Del Rosario School of Architecture and Design Assumption University

Montfort del Rosario SRSC
School of Architecture and Design SRSC
SCHOOL RESEARCH SUPPORT COMMITTEE



#### **Abstracts**

Architecture can speak for itself, but nowadays a large section of people visually illiterate. The new generations of visitors, who have not an eye for architecture, have no ability to read and learn architecture and its environment. Heritage Interpretation is presented in ways that help visitors discover the hidden messages in historical monuments and be understood by its visual elements.

The Historic City of Ayutthaya is listed as the World Heritage which expresses ideas, beliefs, and creativity of Ayutthaya people. It is subsequently extremely popular for Siamese architecture. The problem is those surviving monuments of Ayutthaya are mainly of brick structure and most of them had fallen off. Yet, the physical remaining in the Historic City might lose some potential in visual presentation in architecture. In designing of interpretation programmes or service, it is indispensable to create them sense and aware of its existence in its visual elements of building.

In order to improve the existing interpretation service, and analyze the current situation, problem faced, limitation, and restriction in-situ, this study has pointed out the importance of architectural monument interpretation and presented the way general visitors perceive a message from heritage, particular in the complex of architectural monuments in the historic city of Ayutthaya. A wide variety of heritage attraction and visitors motivation in Ayutthaya had reflected on how they can access visual information from architecture. The database can be used for determining and proposing of the interpretation framework and strategies model to catch up on the new visitor's interest. The Historic city of Ayutthaya will become the complete source of learning outside the classroom, which cultural tourism will be followed by.

This year faculty members engaged in several projects that have been utilized by owners as well as users. Projects include commissioned by public and private sectors who benefited in terms of commercial use and fufilling of programs and requirements.





### **Packaging Research and Design Development**

Project Name:โครงการพัฒนาอุตสาหกรรมอาหารของไทยให้เป็นครัวอาหารคุณภาพ ของโลกของสถาบันอาหารกลุ่มที่ 4.6

- 1 Product Name: Rambutan Rosa Wine/Manufacturer: กลุ่มสหกรณ์ การเกษตรชัยบุรี จำกัด /Packaging Design Consultant: Piyanat Dabbhasuta
- 2 Product Name: น้าพริกกุ้งเสียบผสมโนริสาหร่าย/Manufacturer: บริษัท พีพีเอ็นฟูดส์ จำกัด /Packaging Design Consultant: Piyanat Dabbhasuta

# Project Name: NFI Project for Packaging Design: Thailand Food Quality to the World

- 3 Product Name: Cultured Coconut Milk/Manufacturer: Earth Born Co.,Ltd /Packaging Design Consultant: Piyanat Dabbhasuta
- 4 Product Name: Choco Banana with Green Tea/Manufacturer: In season-foods Co.,Ltd /Packaging Design Consultant: Piyanat Dabbhasuta

Project Name:โครงการเสริมสร้างมูลค่าทางเศรษฐกิจแก่อุตสาหกรรมอาหารและสร้า งความเชื่อมั่นให้แก่คุณค่าอาหารของไทยของสถาบันอาหาร

5 Product Name: มัสมั่นทุเรียนไก่บรรจุกระป๋อง/Manufacturer: บริษัทสยาม ท่าใหม่จำกัด /Packaging Design Consultant: Piyanat Dabbhasuta

## Project Name:โครงการพัฒนาอุตสาหกรรมอาหารของไทยให้เป็นครัวอาหารคุณภาพ ของโลกของสถาบันอาหารกลุ่มที่ 4.4

- 6 Product Name: ผงโรยข้าวจากปลาสัมหมุนไพร/Manufacturer: กลุ่มแม่บ้าน เกษตรกรเชียงงา /Packaging Design Consultant: Piyanat Dabbhasuta
- 7 Product Name: ขนมลูกชุบไส้ไข่เค็ม/Manufacturer: บริษัท ลูกชุบรัตนาขนม ไทย จำกัด/Packaging Design Consultant: Piyanat Dabbhasuta

#### **Evidence:**

The company provided certificate of utilization for each product.

## 8 **ECONO THAILAND-OFFICE AND FACTORY** JATURONT BOONLA-OR

## Evidence:

- Indication of Utilization by owner Users participation images

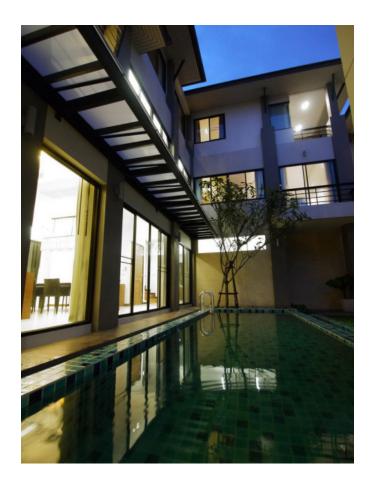


## 9 WILLOW 49

## **SUPARATH VALAISATHIEN**

## Evidence:

- Indication of Utilization by owner
- Users participation images



## 10 THE WHITE HOUSE CAFE PRIMA VIRIYAVHADHANA

## Evidence:

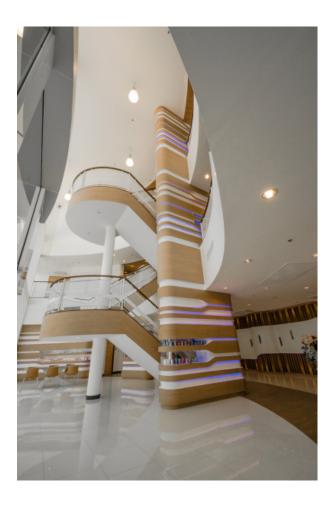
- Indication of Utilization by owner Users participation images



# 11 THAI BEVERAGE TRAINING CENTRE TEERASAK KUHARUNGRO

## Evidence:

- Indication of Utilization by owner
- Users participation images



#### 12 AN EMERGING DIRECTION IN HEALTHCARE **FACILITY DESIGN: DERMATOLOGY AND AESTHETIC CENTER, SERIRAK HOSPITAL**

## **CHANANYA APIWATPONG**

#### Evidence:

- Indication of Utilization by owner Users participation images



#### **Qualifying Creative Works**

4

This year SRSC has set up the Peer Review Committee to review creative works by faculty members of Montfort del Rosario School of Architecture and Design. The committee consists of external and internal professionals as follows:

#### ARCHITECTURE

Pisit Viriyavhadhana

วุฒิสถาปนิก สาขา สถาปัตยกรรม

Chatchai Gadavanij/ Associate Professor

วุฒิสถาปนิก สาขา สถาปัตยกรรม

Yingsawad Chaiyakul P.h.D/Associate Professor

(External Committee)

สามัญสถาปนิก สาขา สถาปัตยกรรม

#### LANDSCAPE ARCHITECTURE

Dr. Nitichan Plaumarom/Associate Professor

วุฒิสถาปนิก สาขา ภูมิสถาปัตยกรรม

Montfort del Rosario SRSC School of Architecture and Design SRSC SCHOOL RESEARCH SUPPORT COMMITTEE

Karsten Jarmer

Landscape Design Professional

Veera Leelapattanaputi

Landscape Design Professional

#### **INTERIOR ARCHITECTURE/DESIGN**

Khemita Visudharomn

วุฒิสถาปนิก สาขา สถาปัตยกรรมภายใน

Ornlaaw Thanapolkiat

สามัญสถาปนิก สาขา สถาปัตยกรรมภายใน

ประภัตร์ รอดสุชา

วุฒิสถาปนิก สาขา สถาปัตยกรรมภายใน (External Committee)

#### **PRODUCT DESIGN**

Chutarat Laomanacharoen/Assistant Professor

Product Design Professional

Wannida Nivartvong

Product Design Professional

Krisaya Luenganatakul (External Committee)

Product Design Professional

#### JATURONT BOONLA-OR

PROJECT FACTS: This project has started with the owner willingness to integrate "Eco Architectural Design" to their factory renovation and the new office. The passive design for the both buildings mainly focused on a better natural lighting and air ventilation application. The factory building was designed according to its previous structure as well as the concept of eco-design and sustainable energy preservation. The office building, on the other hand, was later requested as an additional section by the owner. The building was designed on the a new structure which will connect to the old structure of the factory by providing joints.



#### WILLOW 49

#### SUPARATH VALAISATHIEN

#### ความเป็นมาโครงการ

เนื่องจากทางบริษัท ซึ่งเป็นเจ้าของที่ดินเปล่า เล็งเห็นว่าทำเลทำเลที่อยู่ใจกลางเมือง, สามารถต่อ กับเส้นทางต่างๆหลายเส้น ซึ่งสะดวกในการเดินทาง และมีชาวต่างชาติอาศัยอยู่มาก จึงเหมาะสม ที่จะทำบ้านพักอาศัยให้เช่า โดยเฉพาะกับชาวต่างชาติ ที่อาศัยหรือทำงานบริเวณนี้

#### แนวความคิดในการออกแบบ

"การส่วนหนึ่งของครอบครัว" ไม่ง่ายนักที่จะให้อาคันตุกะรู้สึกถึงคำว่า"บ้าน" กับที่อื่นที่ไม่ใช้บ้าน ของตนเอง แต่ถ้าต้องทำ เราเริ่มด้วยใจที่เป็นมิตร สร้างสถาปัตยกรรมที่มีความอบอุ่น ด้วยการ โอบกอดของสถาปัตยกรรม เป็นกอดเบา เงียบสงบ ชวนให้อุ่นใจ แต่เป็นมิตร ความเป็นหมู่ เดียวกัน คล้ายแต่ไม่เหมือนกัน

เมื่อแรกคิดว่าจะยากมากแต่พอเริ่มการออกแบบกลับง่ายนิดเดียวด้วยมรดกของชาติ "เรือนไทย" มีชายคายื่นยาว, ระแนงบังแดด และค้ายันหลังคา แม้วัสดุรายละเอียด รูปทรงจะไม่เป็นไทย ชัดเจนนัก แต่ใช้บรรยากาศแบบเรือนหมู่ การเปิดโล่งตรงกลางเลียนแบบชานบ้านแล่นต่อถึงกัน แต่ยังคงความเป็นส่วนตัวแต่ละหลัง เอาส่วนที่ร้อนไปไว้กรอบนอก เพื่อกันเสียงรบกวนจาก ภายนอก และยังมีสระน้าเพิ่มความเย็นสบาย สร้างสภาพให้อากาศถ่ายเทลมพัดเย็น แดดอบอุ่น กลิ่นอาหารชวนน้ำลายไหล เสียงหัวเราะของเด็ก เสียงกิจกรรมในบ้านข้างเคียงลอยมา ไม่ยาก เลยที่จะพักพื้นจิตใจจากความเหนื่อยล้าของภาระในแต่ละวัน ทำให้อาคันตุกะรู้สึกเหมือนบ้านและ "ตกหลุมรักประเทศไทย"

#### สภาพแวดล้อมโครงการ

คำอธิบายประกอบโครงการ สภาพแวดล้อม งานสถาปัตยกรรม การออกแบบพื้นที่การประสม กลมกลืนกับสภาพแวดล้อม ภูมิอากาศ วัฒนธรรมในพื้นที่

เนื่องจากที่ตั้งอยู่ใจกลางเมือง, สามารถต่อกับเส้นทางต่าง ๆหลายเส้น จึงมีสภาพโดยรอบค่อนข้าง จอแจและแน่นหนา ผู้ออกแบบจึงใช้บรรยกาศแบบเรือนหมู่ไทย ๆ ชานต่อกันแต่เป็นส่วนตัว เปิด โล่งตรงกลาง ก่อให้เกิดความเป็นส่วนตัวของโครงการ รวมทั้งกันเสียงรบกวนจากภายนอก มีสระ น้ำเพิ่มความเย็นสบาย เอาส่วนที่ร้อนไปไว้กรอบนอก สร้างสภาพให้อากาศถ่ายเทลมพัดเย็น



#### PATTAYA RESIDENCE

#### VEERA LEELAPATTANAPUTI

Embrace the nature.

The house is located in the downhill / seaside vacation village near Pattaya Area. The owner of the house is looking for a place to called home for their family as well as occasionally accompany with their parents. The village is well maintained and secured with strict rule of appearance design, such as height limit, color tone, and material selection controls. The house is designed as primary house for family with 2 children. Even though the family has only 4 persons, the house is planned to have several get together spaces for occasionally relatives visiting. The house is approximately 1200 sq.m. with large terrace areas both front and back yards in which are intended for outdoor activity as well as ventilating air flow mechanism thru the house. The planning of the house is quite simple set as it breaks into 2 wings with the third block and terraces linking between them. The front facade is facing south side which the afternoon sun would penetrate inside the house however, with court and long front terrace, the sunlight would only infiltrate lightly.

The functions are Composed of 4 bed rooms with many typical functions for a well living house, however the additional function spaces such as courts, multi-purpose room, roof deck, and semi outdoor living areas would be added to perfect the lifestyle of the family as well as balance the individual and social spaces for various activities.

The main finishing material choices are terrazzo and wood in which are intended to create the warm and cozy, nostalgic feeling for both interior and exterior as well. Landscape is also an important feature for this house as it would generate the lively atmosphere as well as provide a perfect outdoor space despite the unpleasant humid weather.



#### THE WHITE HOUSE CAFE

#### PRIMA VIRIYAVHADHANA

ร้านอาหาร The White House Kafe ตั้งอยู่ถนน หัวหมาก ซ.9 ทางเจ้าของโครงการต้องการ ให้การออกแบบร้านมีลักษณะโปร่งโล่งสบาย มีความอบอุ่นเป็นกันเองและมีความแตกต่างจาก ร้านอาหารที่อยู่ในบริเวณข้างเคียง ทางผู้ออกแบบได้นำเสนอให้เอาชื่อร้านที่มีอยู่มาใช้เป็น concept ในการออกแบบ เนื่องจากงบประมาณและระยะเวลาการปรับปรุงช่อมแชมอันจำกัด ผู้ ออกแบบและเจ้าของมีความคำนึงถึงการปรับปรุงที่จะส่งผลกระทบต่อโครงสร้างอาคารให้น้อย ที่สุดแต่ให้นำมาซึ่งผลต่อภาพลักษณ์ที่เปลี่ยนไป ผู้ออกแบบจึงนำเสนอให้มีการปรับปรุงรูป ลักษณ์ของช่องเปิดอาคาร (ช่องหน้าต่าง ประตู) การยกฝ้าเพดานภายในให้สูงชื้นเพื่อให้เกิดความ โปร่งโล่งสบายตาจากบริเวณภายในร้าน และโดดเด่นจากภายนอกร้านมองเข้ามา ร่วมไปถึงการ จัด landscape ภายนอกอาคารโดยมีการเพิ่มมูนนั่งเล่นในสวนและน้ำพูเพื่อสร้างบรรยากาศ



#### **MEDIA ACOUSTICS**

#### VATCHARAT SAMMAKAMAI

#### PROJECT FACTS

"Media Acoustics" is the company that deals with mobile and housing audio business. The office is located in the commercial building around the Rama III road. Apparently, the project is composed of office functions: lobby, service area, stock area, office areas, executive office, conference room, meeting room, sound testing room, and staff pantry.

#### DESIGN PROCESS AND CONCEPTUALISATION

The owner's intention was for the office to be the interconnection place between the office and the customer, yet carry the relaxed and comfortable atmosphere. Consequently, the conceptual design approach derives from the use of energetic color and the choice of natural material that tentatively leads to the sense of fun, friendly, and dynamic working environment



#### THAI BEVERAGE TRAINING CENTRE

#### TEERASAK KUHARUNGROJ

#### PROJECT FACTS

The Thai Beverage Can Training Center which is the part of Thai Beverage Can Ltd. (TBC) is Thai-USA joint venture between Berli Jucker Public Company Limited, located Nongkae, Saraburi. The company is a leading manufacturer of two-piece aluminum cans and ends for beverages and beer. The requirements were to design training and leisure facilities for both client and employees to support working environments for total area of 2,160 square meter which included technical lab, client lounge, company exhibition area, tele-conference room, meeting rooms, 3 training rooms, language lab, employee's lounge, library, multi-purpose room, fitness, auditorium and lobby hall with grand connecting stairs showcase.

#### DESIGN PROCESS AND CONCEPTUALISATION

The client requested an outstanding training facility that support the idea of innovative company with advance technology in can production. This has became the conceptual solution that support the company identity and image



AN EMERGING DIRECTION IN HEALTHCARE FACILITY DESIGN: DERMATOLOGY AND AESTHETIC CENTER, SERIRAK HOSPITAL

#### CHANANYA APIWATPONG

Today, evidence-based design is being questioned in many notions such as the obscurity of criteria for physical features that left designers in the dark when it comes to design application.

[3] Further, as hospitals in Asia have become more than a place for healthcare but an important part of tourism industry, owners and investors seek for alternatives in design approach. One of the trends is to redefine hospitals as a place that provide hospitality services hence the emergence of the borrowing of concepts used in hospitality design. This new consumer-based design is starting to take shape especially in aesthetic medication such as dermatology and plastic surgery where medical functions are less complex. Consumers became the center for design hence the more vivid use of colors and patterns that resemble retail shops.

The new dermatology and aesthetic center of Serirak Hospital clearly exemplified this new trend in health care design. The interior architect, Chananya Apiwatpong, intended this new extension to be a "pleasant" place for patients and healthcare providers alike. The planning was tailored to the functions prescribed by doctors and nurses who reflected on their experiences which were used to shape rooms and allocations of furniture. Instead of the usual hygiene look, bold floral pattern was used on the panels to add life to the otherwise sterile waiting area. Stylistic furniture also toned down the cold ambient. The gallant decision was encouraged by the owner of the hospital who wanted to provide patients with special treatments apart from the usual services. This radical break from conservative design is a starting point in the development of design methodology for health care facilities that gears toward consumer-centered design instead of the prominent evidence-based design of the twenty first century.



#### NUTTHAWUT PIRIYAPRAKOB

#### PRACHASONGKRAO KINDERGARTEN





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