

농촌 건축 디자인에서 지역문화의 미의식 가치 연구

Study on the Values of Regional Cultural Aesthetics Consciousness in Rural Architectural Design

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Abstract

Regional culture default has become a problem to be resolved in the study regarding the status quo of rural renewal architecture in China. It is widely known that regional culture plays a crucial part in terms of people's wellbeing. For the moment, most of the studies on regional culture were made from the perspectives of humanities and sociology. Being fully aware of this problem, the values of regional culture were studied from a neuroaesthetic point of view. Firstly, the significance of memories in aesthetic perception model was confirmed in this study starting with the aesthetic perception model itself. Secondly, the related studies regarding autobiographical memory were analyzed. Positive emotions come from positive memories. Therefore, activating autobiographical memory is a resultful approach to obtain positive emotions compared with other approaches. As shown in the studies applying fMRI technology that positive autobiographical memory can activate the striatum in a prominent manner. Such activation of striatum means the activation of the brain reward mechanism. Therefore, the positive autobiographical memory is of great significance for arousing the aesthetic consciousness. At last, related elaborations were made on autobiographical memory and regional culture in this study. On account of the formation of autobiographical memory is greatly affected by regional culture. As a result, the perceptual results triggered by the architecture with regional culture are under the influence of the brain reward mechanism activated by the autobiographical memory. This was considered the source of aesthetic perception for the architecture with regional culture in this study. The aesthetic perception generated by the architecture with regional culture was expounded in this paper by means of the neuroaesthetic analysis method on the basis of autobiographical memory. Hoping to provide supportive evidence for the values of regional culture in architectural design.

Keyword

Rural architecture(농촌 건축), Regional culture(지역문화), Neuroaesthetics (신경 미학)

요약

중국 농촌 건축 재생 활동에 관한 연구에서 지역 문화의 부족이 지적되고 있다. 지역 문화는 삶의 질을 높이는 데 중요한 역할을 하는 것으로 알려져 있다. 이는 건축 재생 활동에 사용되는 지역 문화 연구 대부분이 인문학과 사회학적 시각에 편중되어 있기 때문으로 보인다. 본 연구는 이러한 문제점을 인식하고, 신경 미학 관점에서 지역문화의 가치를 연구하였다. 첫째, 미의식의 지각패턴에서 출발하여 미의식으로 기억되는 과정의 중요성에 집중하였다. 둘째, 자서전적 기억 (Autobiographical memory) 에 관한 선행 연구를 분석하였다. 기억에 관한 연구는 긍정적 추억이 긍정적인 정서를 가질 수 있게 함을 보여준다. 이런 긍정적인 정서를 얻는 신경 과정에 자서전적 기억의 활성화가 효과적이다. fMRI를 사용한 연구에서 긍정적 자서전적 기억이 선조체(Striatum)에서 유의미한 활성화를 일어나게 하는 것을 볼 수 있다. 이러한 선조체는 활성화는 뇌 보상 메커니즘(mechanism)을 대표한다. 따라서 보다 적극적인 자서전적 기억은 미적 감성을 불러일으키는 데 중요한 역할을 한다. 마지막으로 본 연구는 자서전적 기억과 지역 문화의 영향에 대해 논의한다. 자서전적 기억의 형성이 지역적 문화에 의해 큰 영향을 받기 때문이다. 즉 지역문화를 가진 건축에서 촉발된 지각의 결과는 자서전적 기억으로 활성화되는 두뇌 보상 메커니즘(mechanism)의 영향을 받는다. 이를 지역적 문화를 가진 건축적 미의식의 원천 중 하나로 볼 수 있다. 본 연구는 지역문화에 의해 발생한 자서전적 기억을 기초로 건축 미의식을 신경 미학의 분석으로 설명한다. 이 연구가 건축 디자인에 있어 지역문화의 가치를 제공하는 근거가 되기를 기대한다.

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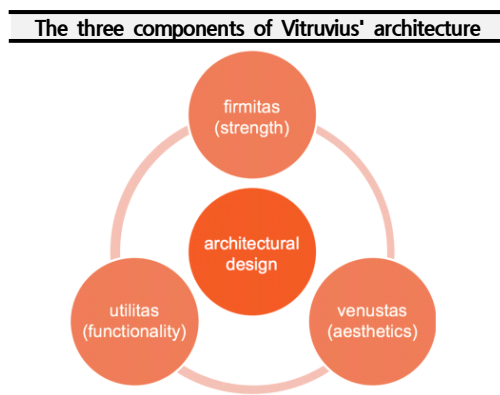
Reference

1. Introduction

In fieldwork related to Chinese rural architectural styles, the phenomenon of replicating the Western architectural styles or the architectural styles of other regions in China appears repeatedly. For the moment, there is substantial interpretations in regard with the importance of regional culture, for instance, the spirit of place theory proposed by Christian Norberg-Schulz from the perspective of humanities, the conditions of place identity proposed by Georgia Butina Watson; As well as the four characteristics of rural sustainability proposed by Gy Ruda from a sociological point of view and so on. But most of these studies mainly focus on the traditional perspective of humanities and the sociological perspective of rural conservation. The Roman architect Vitruvius emphasized aesthetics as one of the three core aspects of architectural design¹⁾(Table. 1). While

1) Coburn A, Vartanian O, Chatterjee A. Buildings, beauty, and the brain: A neuroscience of architectural experience., *Journal of Cognitive Neuroscience*, 2017, Vol.29, No.9, p.1522

T a b l e. 1. Three Points of Architecture by Vitruvius (Vartanian, 2017)



there are relatively little empirical researches on the ability of regional cultures to produce aesthetics. Neuroaesthetics is a newly emerging research field whose goal is to understand the neural basis of human aesthetic appreciation, to study human cognition and behavior through neuroscience and cognitive science, so as to integrate the cognitive and neurogenic interpretations. Therefore, this paper hopes to study the aesthetics of regional culture in architecture from the perspective of

neuroaesthetics, so as to provide an empirical research argument for the significance of regional culture in architectural design.

2. Status quo of rural architecture

2-1. Status quo of rural architecture in China

Against the backdrop of globalization has become a strong context of contemporary society, as far as the architecture is concerned, it has brought new construction techniques, construction materials along with new architectural theories, architectural genres and architectural forms. In the meantime, it is worth focusing on the fact that this phenomenon has also brought a strong impact on regional architectural cultures around the world. The tendency of global cultural convergence has gradually submerged the regional culture of architecture, the nationality of architecture has been gradually replaced by the “internationality” of architecture, and the regional cultural characteristics have the performance of decline and convergence.

In rural areas of China, a great deal of such problems appeared, mainly in the forms of the identity and urbanization of architectural styles, or in the chaotic architectural forms that representing semi-urban and semi-rural styles. This urbanization not only improved the rural living environment, but also destroyed the traditional landscape inherent in the countryside. For catering to the tourists, the local environmental landscape and climatic characteristics were neglected, high-end leisure resorts were built, and exotic plants were introduced to replicate the Western architecture and the traditional architecture forms as well as the vernacular architecture in other regions of China (Table. 2). In a fieldwork on rural Chinese architectural forms of 2016, 480 Chinese villages

Table. 2. Chinese architectural chaos (張立, 2019)

Chinese architectural chaos
Replicate Western buildings

Replicate ancient buildings in other regions


were identified in style and their Chinese rural architectural forms were judged by determined criteria. In accordance with the published data, it can be observed that of the 413 valid samples of thirteen provinces distributed in different regions of China, a total of 67 villages had the phenomenon of replicating the Western architectural forms, and a total of 66 villages had the phenomenon of replicating the architectural forms of ancient styles from other regions. In the meantime, it is worth noting that there is a total of 212 villages with a phenomenon of chaotic semi-urban and semi-rural architectural styles (Table. 3) ²⁾. Therefore, the regionality default in the process of rapid urbanization has become a problem that cannot be neglected.

2-2. Widespread concern of regional culture

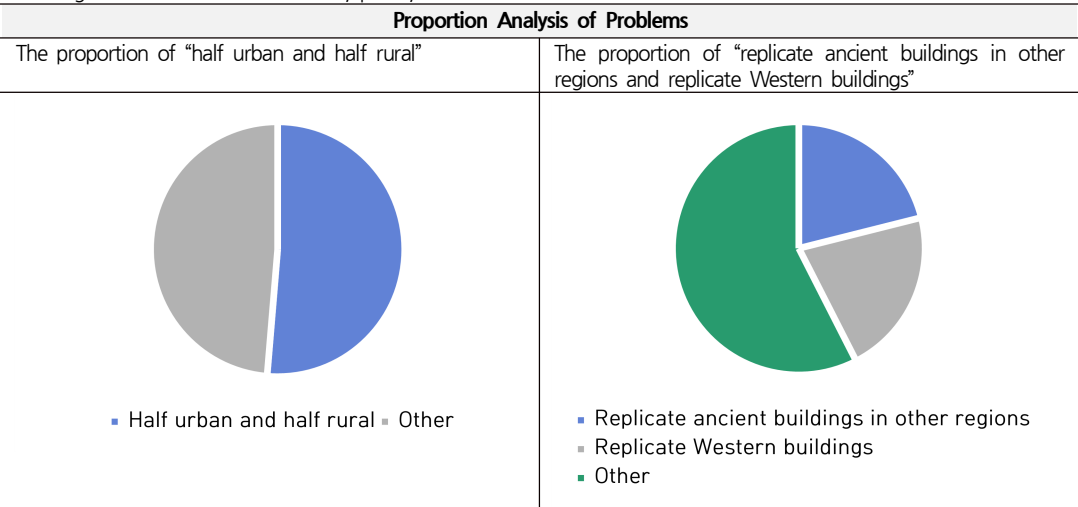
The crisis regarding regional culture has been

2) 張立, 王麗娟, 李仁熙.,
中國鄉村風貌的困境、成因和保護策略探討——基於若
幹田野調查的思考., 國際城市規劃, 2019, Vol.34,
No.5, p.10

Table. 3. Statistics of architectural phenomena in China (張立, 2019)

Recognition of architectural styles in 480 villages in China					
Basic research information			Architectural style		
Research area	total number of villages	valid sample	Half urban and half rural	Replicate ancient buildings in other regions	Replicate Western buildings
Hubei	50	38	30	6	8
Jiangsu	39	39	33	13	10
Shanghai	27	21	19	6	9
Anhui	28	20	15	6	11
Guangdong	30	30	23	5	9
Shaanxi	48	48	13	4	1
Liaoning	58	58	14	0	2
Shandong	30	30	12	0	2
Sichuan	46	46	26	10	6
Guizhou	11	7	3	3	0
Yunnan	43	26	20	9	8
Qinghai	41	21	4	4	1
Inner Mongolia	29	29	0	0	0
Total	480	413	212	66	67

Valid samples: samples with relatively complete information and clearly identifiable features
Semi-urban style and semi-rural style: the criterion is "there are a large number of residential complexes with 3 floors and above, or there are farmers' collective high-rise residential projects"
Criteria for replicating ancient buildings in other regions: "There are streets in the village that imitate the style of other regions or imitating buildings in other regions"
Criteria for replicating Western buildings: "There are buildings in the village that are more than two Western buildings with features such as skins, pillars, etc."



focused by the architectural theorists long before, and in the middle of the 20th century, it was proposed in the “Venice Charter” that the protection of the building itself extended to the protection of the building itself, the culture as well as the environment of the village or region

in which it was located. The principles to be

Table. 4. Regional Culture Related Research

Regional Culture Related Research		
Nation	Author	Book
Japan	Akira Akimoto	An introduction to the theory of contextualism in architecture
U.K.	Graeme Brooker, Sally Stone	Context +Environment
Germany	Rudi Scheuermann, Keith Boxer	Tensile Architecture in the Urban Context
Norway	Christian Norberg-Schulz	Genius Loci:Towards a Phenomenology of Architecture
U.K.	Georgina Butina Watson, Ian Bentley)	Design and Place-Identity
U.K.	Ian Lennox Mcharg	Design with Nature
Japan	Kengo Kuma	architecture of nature
Japan	Kisho Kurokawa	Philosophy of symbiosis
Germany	Sophia , Stefan Behling	Solar Power-The Evolution of Solar Architecture
U.K.	Ivor Richards	T.R.Hamzah & Yeang: Ecology of the Sky
U.S.	Arvind Krishan	Climate Responsive Architecture: A Design Handbook for Energy Efficient Buildings

Table. 5. Gy Ruda's View of Village Conservation In 1988 (Gy Ruda, 1988)

Gy Ruda's View of Village Conservation In 1988	
1	Balance between natural ecology and settlements
2	Protect the historical and cultural space environment
3	Protect local culture
4	Continue community life

observed in the protection of vernacular architecture were also put forward in the Charter on Vernacular Architectural Heritage, which made people have a deeper understanding of the vernacular architecture. The claims regarding regionality (Table. 4) can be told from the

discussions on architecture and the environment from various perspectives such as context, site, natural environment as well as symbiosis philosophy.

In the meantime, a large number of claims on the protection of regional cultures can also be told in sociological studies on the protection of villages. In his study on rural settlements of 1988, Gy Ruda proposed the four characteristics of rural conservation for its healthy and sustainable development³⁾ (Table. 5). Tas Murat (2009) took the Turkish city as an example and held that the construction of villages under the guidance of the government was not only to protect and reconstruct the historical and cultural resources of the village, but also to achieve the sustainable development of the village in the protection, and a more reasonable protection and utilization mechanism should be constructed⁴⁾. Forman (1995) stressed in his study on rural landscape features that emphasis should be laid on the protection and inheritance of the ecological, historical and cultural values of characteristic villages⁵⁾. Tilt and some other people also made investigations on their viewpoints of different groups of people on the village features from the perspectives of villagers, planners, citizens and so on, and it was proposed to take advantage of the traditional architectural materials or techniques to construct the villages and preserve their natural and ecological resources so as to maintain their inherent features of the villages, the community participation mechanism should also be

3) Ruda G., Rural buildings and environment., Landscape and urban planning, 1998, Vol.41, No.2, p.95


4) Tas M, Tas N, Cahantimur A., A participatory governance model for the sustainable development of Cumalikizik, a heritage site in Turkey., Environment and Urbanization, 2009, Vol.21, No.1, p.162

5) Forman R T T., Some general principles of landscape and regional ecology, Landscape ecology, 1995, Vol.10, No.3, pp.133-142

incorporated in the village planning⁶⁾.

In the above literature survey, it can be told from the study that whether it is regional culture or rural conservation, regionality has been focused and advocated extensively, and in the context of the status quo of Chinese rural architectural forms, there is a surprising regionality default, therefore, such phenomenon should be focused in the architectural design of China, the presentation of regional culture should be reinforced consciously, which not only because of the initiatives put forward by relevant scholars on urban architecture and village protection. In the meantime, the architecture with regional culture integrated has been widely praised in the world (Table. 6), and the researchers believe that the regional culture also has its unique favorable charms and values from a neuroaesthetic point of view. Therefore, the values of regional culture in architectural design were analyzed tentatively from the perspective of neuroaesthetics in this study.

Table. 6. Successful case of regional architecture
(<https://www.gooood.cn/>)

Successful case of regional architecture
Weinan-Nanjiao Village, Shaanxi, School of Architecture, (Xi'an University of Architecture and Technology)

Regeneration of public space at the entrance of

6) Tilt J H, Kearney A R, Bradley G., Understanding rural character: Cognitive and visual perceptions., Landscape and Urban Planning, 2007, Vol.81, No.1-2, pp.14-26

Lixiang Village, Nanjing, (Southeast University Architectural Design and Research Institute Co., Ltd.)



Boulogne Stud Farm Renovation and Extension, France, (Joly & Loiret Architecture Agency)



"Red Roof" House, Vietnam , (TAA DESIGN)



3. The aesthetic perception mechanism of brain

3-1. The aesthetics perception model

Perception is not a simple “bottom-up” mechanism of progressive processing for sensory inputs, but rather makes sensation possible by processing sensory information in a context that spans multiple cortical levels⁷⁾. The two terms of

7) Gordon N, Tsuchiya N, Koenig-Robert R, et al., Expectation and attention increase the integration of top-down and bottom-up signals in perception

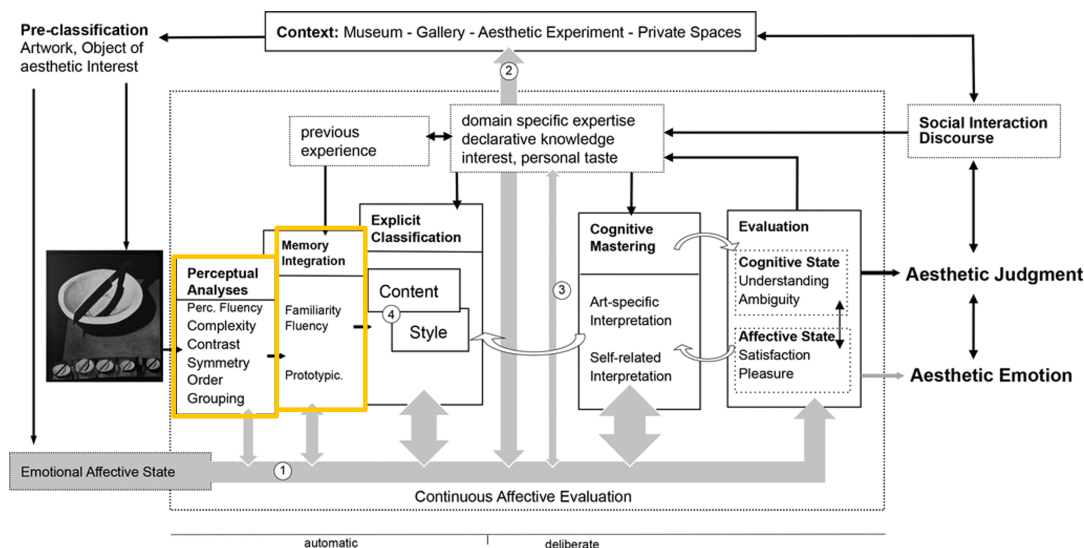


Fig.1 Leder's Aesthetic Experience Model (Leder, 2004)

“art” and “aesthetics” are often applied alternatively in psychological literatures, and such substitution has even become a conventional custom. Though art and aesthetics are often overlapping, they are not exactly the same. As Danto (1997) expressed eloquently that the connection between art and aesthetics is a question of historical contingency, not part of the essence of art⁸⁾. The artworks, especially the architecture which is a carrier of modern art forms, are appreciated for other reasons, in addition to their aesthetics. An apt metaphor is to describe the architecture as an art form, where the source of aesthetic experience not only lies in the visual pleasure, but also influenced by the brain from top to bottom to form favorable impressions. Relevant findings suggest that the bottom-up information is subject to a cycle of generating multiple feedbacks and pre-feedback as they passing through the perceptual, cognitive, and

emotionally related processes⁹⁾. To be precise, aesthetics is a holistic process based on the interaction of perception-cognition-emotion. In the aesthetic model proposed by Leder in 2004¹⁰⁾, the psychological mechanism of the artistic aesthetic experience model was described, providing a comprehensive framework for the development of empirical researches and theories. This framework was designed as an information processing box model that summarized how factors including perception, knowledge, familiarity, and expertise affected the aesthetic experience. In the later empirical studies, the aesthetic mechanism proposed by the aesthetic model of Leder had been continuously confirmed¹¹⁾. The effects of

through different pathways., PLoS biology, 2019, Vol.17, No.4, p.e3000233

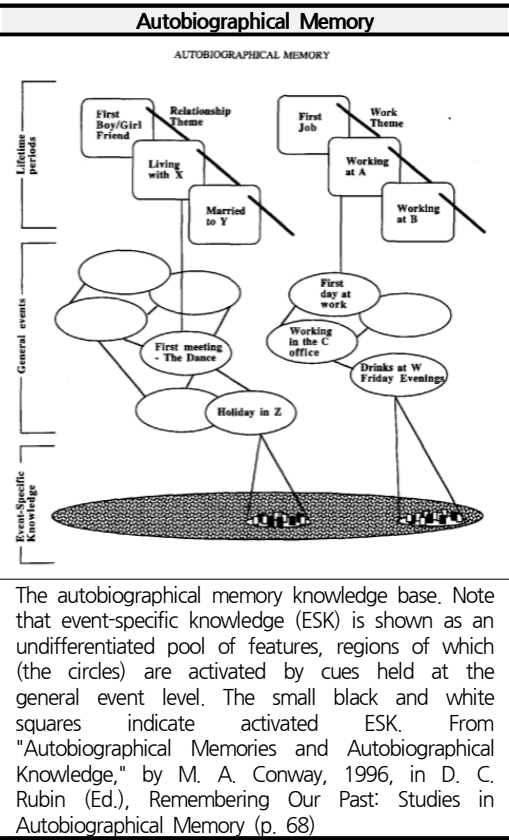
8) Danto, Arthur C. After the End of Art: Contemporary Art and the Pale of History-Updated Edition., Princeton University Press, 2021, Vol. 112

9) Brieber D, Nadal M, Leder H, et al. Art in time and space: Context modulates the relation between art experience and viewing time., PloS one, 2014, Vol.9, No.6, p.e99019

10) Leder H, Nadal M., Ten years of a model of aesthetic appreciation and aesthetic judgments: The aesthetic episode-Developments and challenges in empirical aesthetics., British journal of psychology, 2014, Vol.105, No.4, pp.443-464

11) Cela-Conde C J, García-Prieto J, Ramasco J J, et

Table. 7. Autobiographical Memory (Conway, 2000)



individual experience and memory modules on perceptual outcomes in this model will be focused in this study (Fig. 1). In the next subsection, the concept of autobiographical memory related to this will be elaborated in details.

3-2. The definition of autobiographical memory

Autobiographical memory is a memory system made up of episodes recalled in the life of an individual, and autobiographical memory is broadly defined as those memories recalled regarding the events we have experienced in our lives. In related researches on memory, autobiographical memory is a complex mixture of multiple forms of memories and knowledge,

which is integrated into a coherent self-story. We are all authors of our autobiographical memory, where the past experiences of individual lead to the present self and project into the future, and the autobiography itself defines who we are, how we become like this, and what we will become¹²⁾. This brief definition makes it clear that autobiographical memory is a resource of the self that can be used to maintain or change the various aspects of the self, and in fact, autobiographical memory is closely related to personality development¹³⁾. The human individual remembers a clear and continuous identity as events go on, enabling the individual to create the meaning and purpose for life¹⁴⁾. In the collections of autobiographical memory, the autobiographical memory vault was classified into three broad areas: lifetime periods, general events, and event-specific knowledge on the basis of the self-memory system model organized hierarchically proposed by Conway and Pleydell-Pearce (2000). (Table. 7) Lifetime periods are consisted of the general knowledge about the distinguishable thematic times in the life of an individual. Containing the thematic knowledge regarding the characteristics of this period, such as the activities, relationships, and locations involved, as well as the temporal knowledge about the duration of the period. The general events are more specific than the lifetime periods, including a single representation of the repeating events or a series of related

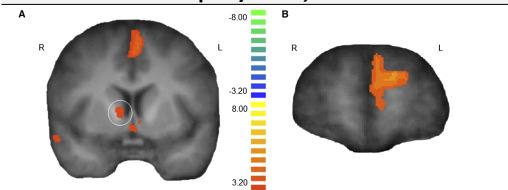
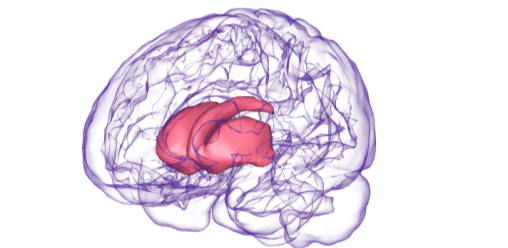
12) McAdams D P., The psychology of life stories[J]. Review of general psychology, 2001, Vol.5, No.2, pp.100-122.

13) Woike B, Gershkovich I, Piorkowski R, et al., The role of motives in the content and structure of autobiographical memory. *Journal of Personality and Social Psychology*, 1999, Vol.76, No.4, pp.600

14) Fivush R. Speaking, silence: The social construction of silence in autobiographical and cultural narratives., *Memory*, 2010, Vol.18, No.2, pp.88-98

al., Dynamics of brain networks in the aesthetic appreciation., *Proceedings of the National Academy of Sciences*, 2013, Vol.11, No.2, pp.10454-10461

Table. 8. Brain regional and functional analysis of autobiographical memory activation

Neural Activity during the Recall of Autobiographical Memory
Experiment Procedure
Nineteen healthy participants (10 females; mean age = 26.1, SD = 7.78) performed a cued recall task while undergoing fMRI. Prior and following the task, participants were given the Positive and Negative Affective Scale (PANAS) to assess mood change during the experiment. They concluded the fMRI session by performing a card task for monetary reward, which served as an independent localizer of reward-related brain activity.
FMRI experiments on brain regions activated by autobiographical memory (Data from Megan E. Speer, 2014)

Correlation region analysis (striatum)

Analysis of striatal activation properties
Increased dopamine release in the dorsal striatum (measured by radioligand displacement of endogenous dopamine) when participants received a potential reward.(Koepp et al., 1998; Zald et al., 2004)

events. The general events are grouped together by common themes, so that when the memory of a general event is recalled, it will prompt the recall of other related events in the memories. Event-specific knowledge (ESK) is the vivid and detailed information about a single event, which is usually in the forms of visual images and sensory perceptual features¹⁵⁾.These three fields

15) Conway M A, Pleydell-Pearce C W., The construction of autobiographical memories in the

are organized hierarchically in the memory vault, together constituting the autobiographical memory of each human individual, and the knowledge stored in the life cycle contains clues to general events, and the knowledge at the general event level requires event-specific knowledge (ESK). When a clue evenly activates the various levels of the autobiographical knowledge base, all levels of knowledge become available, forming the autobiographical memory.

4. The favorable interpretation of regional architecture from the perspective of neuroaesthetics

4-1. The role of autobiographical memory in the generation of positive emotions

The capability to appreciate or maintaining positive emotions is associated with an improvement in the capability to regulate emotions¹⁶⁾, and in the meantime, such capability can promote the adaptation to pressures successfully and result in the generation of positive emotions. In the relevant behavioral tests of patients with depression, this group of people tended to recall fewer positive memories¹⁷⁾. In the FMRI experiment, these patients also exhibited abnormal activation patterns in neural circuits involved in reward treatment¹⁸⁾, including insensitivity to striatum

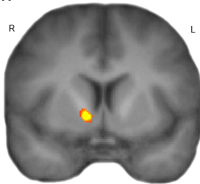
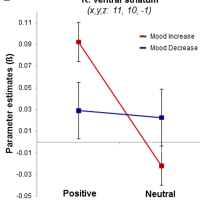
self-memory system[J]. Psychological review, 2000, Vol.107, No.2, pp.261

16) Carl J R, Soskin D P, Kerns C, et al., Positive emotion regulation in emotional disorders: A theoretical review., Clinical psychology review, 2013, Vol.33, No.3, p.344

17) Young K D, Bellgowan P S F, Bodurka J, et al., Behavioral and neurophysiological correlates of autobiographical memory deficits in patients with depression and individuals at high risk for depression., JAMA psychiatry, 2013, Vol.70, No.7, p.699

18) Haber S N, Knutson B., The reward circuit: linking primate anatomy and human imaging.,

Table. 9. Analysis of Controlled Trial Results of Brain Regions Activated by Autobiographical Memory (Megan E. Speer, 2014)

Controlled experimental results of brain regions activated by autobiographical memory	
Experiment Procedure	
The experiments tested neural differences within this region between individuals whose mood improved and those whose mood deteriorated after recalling a memory.	
Experimental Results (Data from Megan E. Speer, 2014)	
<div> <div>A</div>  </div>	<div> <div>B</div>  </div>
	<div> <div>Analyze</div> <p>Groups whose autobiographical memory produced positive emotions had significantly lower striatum activation in the time after stimulation, which demonstrates the credibility of autobiographical memory for striatal activation.</p> </div>

responses and worse stimulation sustainability. These findings demonstrated the importance of events that can trigger positive emotions in the acquisition mechanism of happiness¹⁹⁾. In the meantime, autobiographical memory is a fruitful approach in conditions of triggering positive emotions and activating neural circuits associated with the reward mechanism of striatum. This may be because the positive emotions activated by autobiographical memory tend to be vivid and rich²⁰⁾. In the contrast fMRI experiments between positive autobiographical memory and neutral autobiographical memory, the positive

autobiographical memory in striatum (including bilateral head of the caudate), ventral medial prefrontal cortex, orbitofrontal cortex, and anterior cingulate regions presented more prominent activations (Table. 8) . Among them, the significant increase in the degree of activation of striatum and the prefrontal cortex represented the activation of positive autobiographical recall induced the activation of reward neural circuits, which brought positive emotions. This was also confirmed in the results of another control group experiment in which the negative emotions were generated after recall (Table. 9) (the activation of striatum of groups that developed positive emotions because of autobiographical memory had significantly declined in the time after stimulation, while the groups that did not develop positive emotions did not change significantly).

4-2. The unique values of regional culture in autobiographical memory

In accordance with the result of the fMRI experiment and guided by the conclusion that the positive autobiographical recall can generate positive emotions, the unique values of regional culture for architectural design was elucidated tentatively in this study from the perspective of autobiographical memory. In the autobiographical memory literature, culture is often discussed in the context of cross-cultural differences, and culture influences the differences in autobiographical memory with its independent characteristics ²¹⁾. The autobiographical memory of each individual is generated under the guidance of its unique cultural background. The independent cultural definitions group the self into an elaborately expressive and unique individual. Overall, cultural comparisons showed that individuals from different cultural backgrounds will exhibit very different

Neuropsychopharmacology, 2010, Vol.35, No.1, pp.4–26

19) Pizzagalli D A, Holmes A J, Dillon D G, et al., Reduced caudate and nucleus accumbens response to rewards in unmedicated individuals with major depressive disorder., American Journal of Psychiatry, 2009, Vol.166, Vol.6, pp.702–710

20) Schaefer A, Philippot P., Selective effects of emotion on the phenomenal characteristics of autobiographical memories., Memory, 2005, Vol.13, No.2, p.149

21) Fivush R., Family narratives and the development of an autobiographical self: Social and cultural perspectives on autobiographical memory., Routledge, 2019., p.12

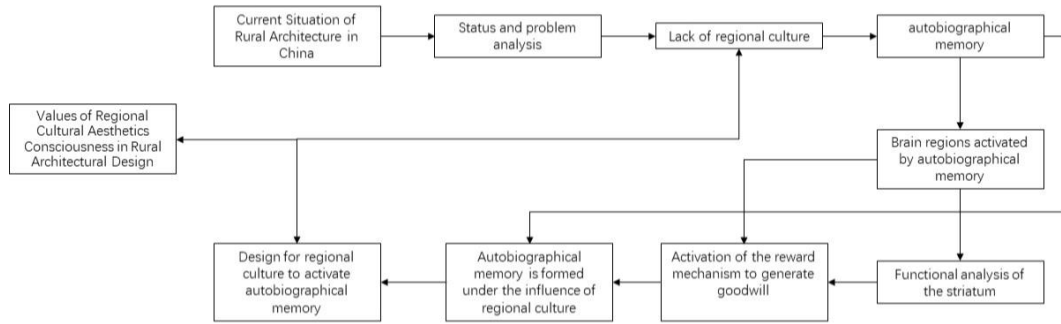


Fig.2 Research Process

autobiographical styles²²⁾. In the meantime, in the narration-related behavioral studies, when an event is considered interesting, people will relate it as their own stories²³⁾, and the stories of parents will gain a higher sense of identity than the stories of friends²⁴⁾. This kind of story is called intergenerational narratives²⁵⁾. The intergenerational connection brought about by such intergenerational narratives also has an important impact on autobiographical memory, and in a broad sense, the impact of intergenerational narratives on autobiographical memory also has a strong regional cultural color. This study hopes to determine the effective influences of regional culture on positive emotions in this manner, firstly, the positive recalls can activate the reward mechanism represented by striatum to generate positive emotions, and autobiographical memory as a way to activate positive recalls also has a

significant effect. In the meantime, as a memory with independent characteristics and has a strong regional color, autobiographical memory is a vivid and rich memory generated under the guidance of regional culture.

Therefore, the study of regional culture has indispensable pertinent significance for activating autobiographical memory, and each region or village has its own unique regional culture, and the integration of local unique regional culture into the architectural design of each region or village can effectively affect the reward mechanism of the brain to activate the autobiographical memory

of the local population and generate positive emotions. This study considers it to be one of the sources of aesthetics that is integrated into regional cultural architecture.

5. Conclusion

Currently, the regional culture default has become an important problem as far as the architectural forms of rural China is concerned. The aesthetic values of architecture forms with regional culture were demonstrated in this paper from the perspective of neuroaesthetics. Starting with the aesthetics perception mode, a conclusion was drawn that aesthetics was

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originated from the bottom-up and top-down perception integration. In the studies regarding aesthetic mechanisms, the memory module in the process of aesthetics perception was focused in this paper. Firstly, the recalls about positive memories can generate positive emotions, and among those ways for generating positive emotions, autobiographical memory is a fruitful approach. It can be told from the relevant fMRI experimental results that the positive autobiographical recalls can significantly activate the striatum that representing the brain reward mechanism, as evidenced in the experimental results of the control group. Through the analysis of the relevant researches on autobiographical memory, it was determined that autobiographical memory was independent memory with strong regional color and independent characteristics. Each region or village has its own unique regional culture. Therefore, for the fact that the integration of regional cultures can activate the autobiographical memory of local populations to effectively affect the brain reward mechanisms to generate positive emotions (Fig.2) . It was considered as one of the sources of architectural aesthetics that can be integrated into regional cultures in this study.

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