

# Cultivation and Incentivization of HCI Research and Community in China: Taxonomy and Social Endorsements

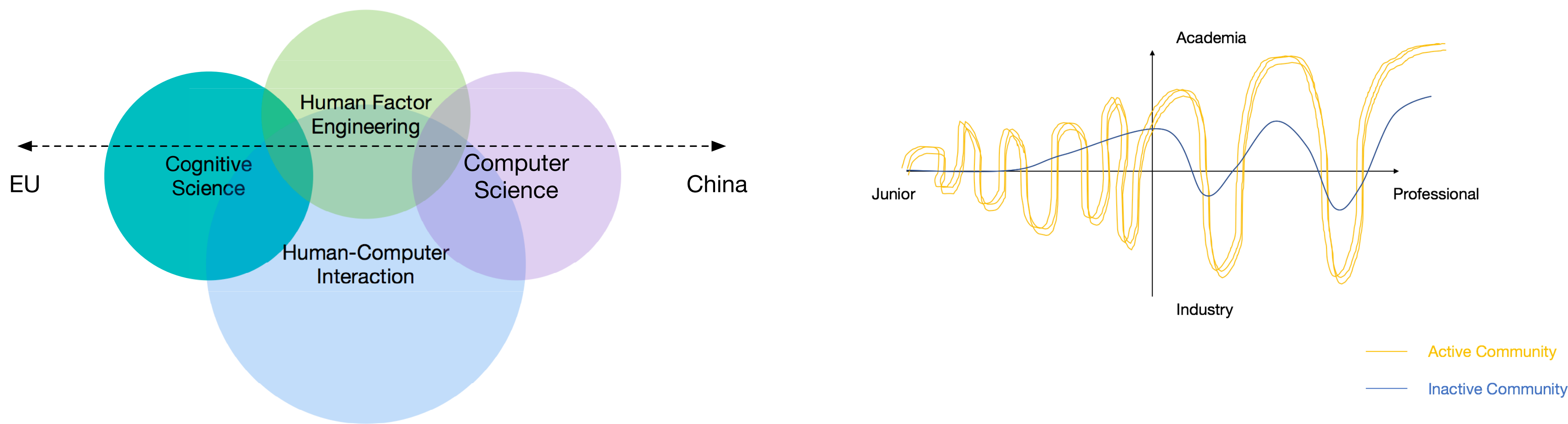


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## Introduction

In China, research publication authors and reviewers focus on technical details. However, the mainstream HCI communities collaborate with different fields of study or work with other researchers in related goals, such as psychology concerns in uncertainty human behavior modeling [1]. HCI community in Germany was founded later than Chinese community, but grown up at a fast place and been successful in offering active society for professionals. Within an active community, researchers from different career stages are entitled equally to participating academia and industry.



## Case Study: Automotive

The role of the automotive industry is as crucial as automotive academia. The main reason is the sophisticated driving test systems, including high-fidelity autonomous driving simulator. Aforementioned industrial-level equipment is hardly affordable for individuals or even some research institutes. Meanwhile, the automotive industry requires a huge number of professionals in diverse fields, in order to form a closed loop from innovation towards interests. Becker et al. pointed out[2], joint R&D in Germany benefits the industry with additional innovation resources, while the intensive internal R&D provokes the opportunity of joint R&D. The fostering cooperation between the automotive industry and academia creates a win-win situation.

## Case Study: VR

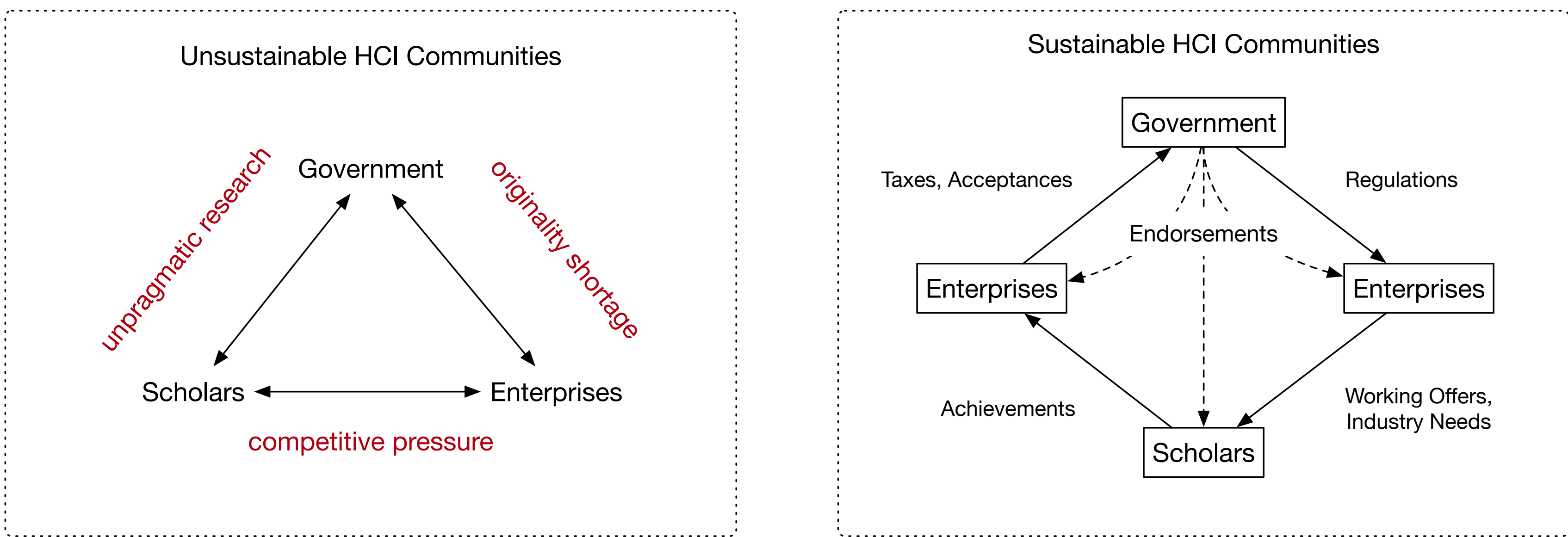
VR community has obtained very different outcomes in the EU and China respectively. The trend of VR investment in China has gradually emerged from the end of 2015 and 2016 to 2017. Over time, due to the lack of phenomenal VR content, shipments, and investment in this field, another winter has rapidly arrived in the VR industry of China. Until the present days, according to a VR patent report[3], China has accumulated only a small amount of technical research and value research that does not sustain and support building its community of VR in the near future. The capital is turning the wind to other areas.

## Endorsements and Obligations

**Government** should shift more focus on the interdisciplinary and application HCI research, apart from the computer-technology-based. The pragmatic application of novel technology in proper user case, will bring much more enormous fortune and benefits towards the society. In the meantime, the government should cultivate a long-term sustainable goal into the future, instead of being obstructed by temporary technical bottlenecks, especially in the current fast changing world. Furthermore, we suspect that, to avoid business oligarchy and short-term research projects, the government should strengthen the endorsement of collaboration between industry and academia, specifically in aspects of sharing expertise, apparatus and opportunities.

**Enterprises** play a critical role in HCI study and they can provide more funding for researchers or institutes to continue their research. In universities or institutions, these capital will be used to enable researchers to carry out novel ideas and prototypes in the HCI study, meanwhile technical innovation will help the companies acquire much more competitiveness. Besides, with limited number of HCI research teams, it is challenging for companies to perform leading research and develop creative products. Thus, the companies should apply for the funding from the government according to their proposals and provide enterprise funding to participated scholars.

**Scholars** do not directly establish connections with the government funding. On the contrary, government departments that endorse trust have adopted regulations to ensure closer cooperation between scholars and enterprises. On the one hand, the employment problem of highly professional scholars can be solved through open recruitment, and on the other hand, scholars can also actively choose enterprises due to the support of laws and regulations.



## Conclusions

The sustainability of HCI community requires government endorsements for enterprise and scholars, and the loop between three:

1. eliminates weakness of value-oriented HCI academic achievements in Chinese society, by eliminating the isolated status among enterprises, government, and scientific institutes.
2. reduces the pressure of opportunities between oligarchs enterprises and researchers by government endorsement and obligations in all companies.
3. expands the communication between the Chinese HCI community and other worldwide communities, since it also creates more opportunities for researchers to observe and cooperate through the actual needs of enterprises, thereby increasing their stakeholder background and producing more research for the future.

Chinese government should not only focus on our existing investments in theory and technology accumulation, but also encourage and incentivize researchers and stakeholders while focusing on the research of our society construction.

## References

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