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COMPLEX THINKING FOR KANSEI STUDIES FOR AN EPISTEMOLOGICAL SHIFT OF THE FIELD

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ABSTRACT

This position paper questions the current situation of kansei studies as a multidisciplinary field of research. The observations on the structure of the research community and on the way papers address the notion of kansei point out the pluridisciplinary nature of the field, centred on the ill-defined notion of kansei. This situation is thought to be an epistemological issue, rather than a structural one. To address this epistemological challenge, we argue to shift towards complex thinking as a paradigm to rethink the field of kansei studies and the notion of kansei. Positioning kansei studies as a complex unit rich of multiple disciplines and of multiple perspectives on kansei lead to a richer dynamic within the research community, and open new ways of collaboration within the community and outside with related disciplines. Therefore, we call for this shift that may impulse a new dynamic in the community actually rich of a great variety of disciplines and practices.

Keywords: complex thinking, complexity, kansei studies, epistemology, dialogic

1 AN EPISTEMOLOGICAL SHIFT IN KANSEI STUDIES

This paper starts with an intuition: the difficulty to establish a definition of kansei that would be satisfying and shared by the community of kansei research is actually an epistemological issue. This intuition is scaffolded by two observations, which also provide insights on the reasons for this inquired difficulty.

The first observation relates to the structure of the community of kansei research. Since the first international KEER conference in 2007, we can observe a clear and strengthening categorisation of the research in kansei by topics related to external fields of sciences or engineering, e.g., kansei textile (related to textile engineering), kansei business (related to business studies), or kansei science (mainly related to psychophysiology and cognitive sciences). We call these external fields the *exo-disciplines* of kansei studies. This situation is due to the interdisciplinary nature of kansei studies, historically structured by many fields that are all focusing on a common concept: kansei. This has mainly influenced the way kansei has been

considered and described by each disciplinary group (or subcommunity): in a way it is compatible with their related exo-disciplines. This compatibility has obvious practical advantages, as it contributes to the strengthening of each kansei research subcommunity, as well as the improvement of its interactions and mutual contributions with the exo-disciplines. However, at the same time, it dilutes the concept of kansei within the global kansei research community, as the multiple descriptions of kansei are built based on the separate efforts of various subcommunities rather than a common effort. It also brings within the community of kansei research a multiplicity of disciplinary perspectives, and therefore issues related to the multiplicity of ontologies and epistemes, and their irreconcilability. For instance, some branches of kansei science have considered the human mind and behaviour from a mind/brain identity theory (Smart, 2011), e.g., (Lévy et al., 2011), while some branches of kansei design have considered the same topic from a phenomenological perspective (Merleau-Ponty, 2002), e.g., (Lévy, 2013). These two approaches, although significantly contributing to kansei science and kansei design, respectively, are fundamentally irreconcilable on the role of the body in the human experience.

The second related to the kansei research literature. Regarding the way kansei is discussed in the literature, three major patterns were observed:

- As a first pattern, most papers omit to explain what kansei is. This may be acceptable when the targeted audience has a commonly recognised and established definition of kansei. However, as discussed previously, this does not work within the kansei research community, structured subcommunities with specific disciplinary perspectives. In such case, the absence of a description of kansei may lead to unclarity in the comprehension of the paper and therefore of the research work. Moreover, these papers do not contribute, at least directly, to the clarification of kansei.
- As a second pattern, many papers tend to solve this situation by proposing a brief explanation of kansei, which is often sufficient to the work presented in the paper. In other words, it may be sufficient for the comprehension of the research as described and discussed in the paper, but does not contribute either to the inquiry about what kansei is. Therefore, while it may support the clarity of the paper and its contribution to the subcommunity, it does not help the entire community of kansei research to discuss and clarify kansei.
- The third pattern relates to papers which have tentatively defined kansei as their main focus (e.g., (Harada, 2003; Lee et al., 2000; Lévy, 2013; Lévy & Yamanaka, 2006; Nagamachi, 2006; Schütte, 2005)), which target the entire kansei community, and often beyond as an audience. Although, many tentative have been published throughout the last two decades, none of these papers seem to have successfully been recognised by the community as a major foundation towards a shared common explanation on what kansei is, or even to have launched a constructive discussion towards such explanation. Therefore, either the dynamics of the community has failed to start such a dynamic, or there might be a sort of resistance towards such endeavour, which prevents from formalising kansei despite its status of being the core concept for the community. In this research, we inquire on the second condition.

Based on these two observations, it appears that over the past 20 years of research in kansei, the community has not been able to establish a description of the concept of kansei capable of satisfying the community at once while being effective for the variety of fields and research programmes involved in the community. If the ambition of the kansei research community is to hold as a coherent field of research, this situation seems problematic.

We argue that if resistance there is, the actual issue is mainly of an epistemological nature relative to the field of kansei studies, rather than it is about a structural one of the community. The essential interdisciplinary nature of kansei studies, and the previously discussed consequential epistemological conflicts make it difficult, possibly impossible to find the sought definition of kansei in a way that would be both satisfactory for all the community, effective in each field of practice, and compatible with the epistemological (and often ontological) perspective of each involved discipline. It appears then that the search for a coherent and common definition of kansei is a lost quest.

This call for taking another perspective on kansei studies at large, which eventually may have consequences on the way kansei is considered as the core concept of kansei studies. To address this challenge, we propose in this paper an epistemological shift of kansei studies. We suggest to address the interdisciplinary nature of kansei studies as a *complex unity*, enabling a *dialogical* interplay between kansei disciplines, especially on the fundamental concept of kansei.

2 COMPLEX THINKING

The two terms *complex unity* and *dialogic* are proposed by Morin (2014) to describe and to structure complex thinking. The premise of complex thinking is the complexity of the world as we intend to make a comprehensive sense of it. Morin suggests that the world is like a fabric made of multiple threads. These threads are material and immaterial *stuff* of the world. Their composition that creates the fabric of the world is inherently complex. Comprehending the world – or actually any complex concept – requires another strategy than reductionism, which may be powerful to understand one thread but not the fabric. To address the fabric and its complexity, the strategy ought to involve a complex thinking approach. Such an approach is opposed to a simplifying approach, such as reductionism, which disregards the variety of perspectives that may be taken to address an object of inquiry and tends to unify the world through a single vision, getting ‘blind’ to what does not fit this vision. In other words, while simplifying thinking focuses on one aspect of a reality and intends to elaborate a coherent understanding of this reality through a unique selected lens (e.g., one discipline), complex thinking intends to pay attention to the complexity of the world fabric, to pay attention to multiple lenses and to their interactions in order to create a more comprehensive understanding of this fabric. Complex thinking is therefore a strategy to address a broad concept that can only be addressed partially and improperly through simplifying or unidisciplinary approaches. As discussed in the first section, as a multidisciplinary field, kansei studies and by extension kansei seem to be in this situation, and therefore complex thinking may be a strategy to address the field.

To pragmatically understand complex thinking, we will now discuss the terms *complex unity* and *dialogic*, which are contributing to the structuring of complex thinking, and apply them to the field of kansei studies.

A complex unity is a coincidence (or an organisation) of various logics, possibly contradictory to each other, in a complementary, concurrent, and possibly antagonist unit. Such unit gives the possibility to think a concept, e.g., kansei studies in our case, through a complex thinking approach, keeping together the diversity within the concept while comprehending this concept as a unit. In our case, we intend to keep the diversity of kansei disciplines while considering kansei studies as one. Therefore, we may consider here kansei studies as a complex unit (the fabric), brought together through the common focus on kansei, yet framed by diverse logics involved in diverse kansei disciplines or subcommunities (the threads).

Such complex unity can operate through dialogic. Dialogic is an approach “offered by tensions, oppositions, and contradictions among explanations of the same phenomenon” to “stimulate the development of more encompassing theories” ((Poole & van de Ven, 1989) in (Kristensen, 2020)). It enables then the aforementioned logics to interact as a complex unit, without losing their own unity. In the case of kansei studies, while the differences and the contradictions between the kansei disciplines remain, these can continuously interact within the complex unity (i.e., kansei studies as a whole), learn from each other and consequently progress without the intention to reach a synthesis (which is not of a dialogic nature, but rather of a dialectical one, possibly towards a simplifying thinking). Diversity is maintained within unity, which is maintained within diversity.

3 KANSEI AS THE CORE OF THE COMPLEX UNITY

As kansei is the core topic of the dialogic within kansei studies – now considered as a complex unit –, the attempt to propose one definition of kansei to be commonly agreed among all disciplines appears useless and actually vain. Such reductionistic attempt would fail because of the inherent contradictions among kansei disciplines, which thread the complexity of kansei studies. Moreover, it would have as a major effect to constrain disciplines regarding their own understanding of kansei, and consequently their evolution over time. The complex thinking may support each kansei discipline to open towards others as well as towards exo-disciplines. Overall, this regard on kansei studies transformed what was seen as a critical issue in the first chapter as a strength and richness in the complexity of kansei studies (the second chapter).

The aim of discussing kansei is therefore not to obtain a common definition of kansei, but rather to engage in discussions that maintain the dynamics and the liveliness of kansei studies while supporting the progress of kansei disciplines in their diversity.

4 CONSEQUENCES FOR KANSEI STUDIES

The first consequence for kansei studies is its endeavour towards the definition of kansei. We clearly propose here to stop looking for a unified definition of kansei for the entire field of kansei studies. Differently, we suggest that the definitions or descriptions of kansei proposed by each

kansei disciplines (or subcommunities) should be exposed, shared, and discussed to enrich each perspective, to enrich each discipline without the aim of harmonising the entire field. Its richness will come from the variety of perspectives and from their capability to learn from each other.

Consequently, inquiring kansei studies as a complex unit invites to inquire kansei disciplines through their interactions, rather than in an isolated way (relations rather than disjunctions). It is also about questioning the effect of these interactions rather than their nature (effectiveness rather than causality). The pragmatic ambition is to consider kansei studies as a whole – keeping in sight the diversity and the possible contradictions within it – and to determine how the various disciplines can contribute to each other through dialogic.

Moreover, it is also valuable to consider the organisation of the kansei studies from this perspective. The notion of organisation covers here both the state and the processes involved in kansei studies, as well as the dynamics leading to the evolution of the field. How do the kansei disciplines operate together, and impact each other and the whole at the same time. As Morin states, the aim of inquiring the organisation is not to look for a “romantic” harmoniously structured totality, but rather to “find the principles of common organisation, the principles of these principles, and the characteristics of their diversification” (Morin, 2014).

As a last consideration, the common principle among kansei disciplines is that they all interact with exo-disciplines (cf. chapter 1), as well as with each other through the notion of kansei. Therefore, kansei studies interacts with multiple disciplines outside the system, feeding its own internal organisation and principles to remain its unity while continuously evolving, and feeding exo-disciplines as well from the original positions and research programmes conducted by kansei researchers. This way, exo-disciplines play the role of co-organisers to the field of kansei studies, enriching its organisation as a complex unit. Conclusively, kansei studies can be seen as an open system, necessarily connected to external fields, yet with a specific identity structured around kansei.

5 CONCLUSION

This paper takes a radical position on kansei studies and on its old project to define kansei. Considering the challenges experienced by the field during the past decades, we argue that the issue is not structural but epistemological. Based on this consideration, we propose a novel way to progress on the development of kansei studies, now taken as an open system requiring complex thinking to be handled and developed further as a complex unit of research.

From this perspective, two programmatic consequences can be elaborated. First, we argue for the multiplicity of definitions of kansei. This demands that each kansei discipline elaborates a specific definition of kansei to be coherent with the discipline and effective for the practices within this discipline. Second, the variety of kansei definitions demands that these definitions are shared and discussed, so that each discipline can learn from the others and continue developing, with no intend to reach a common definition of kansei. To the opposite, differences are the strength for disciplines to support each other.

Such dynamics created in the field of kansei studies will hopefully bring the kansei disciplines closer together, strengthening their collaborations, strengthening in the same movement the relevancy and the effectiveness of kansei studies as a field, and last but not least, contributing to informing exo-disciplines (design, engineering, business studies...) how kansei can be handled and support their own fields as well.

We hope the call for this shift towards complex thinking, considering kansei studies as a complex unit, to be considered by multiple members of the kansei community within multiple kansei disciplines, as it is obvious that this research intent will not reach satisfying results by the sole effort of one discipline.

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