# Fostering Innovation through Disjunctive Dissonance: A Study on Theoretical Framework for Design Practices

**Karna Mustaqim**
Department of Visual Communication Design,
Faculty of Design & Creative  Industry,
Universitas Esa Unggul, Indonesia
karna.mustaqim@esaunggul.ac.id

**Martin L. Katoppo**
Department of Interior Design, Faculty of Design,
Universitas Pelita Harapan, Indonesia
martin.katoppo@uph.edu

**Iwan Zahar**
Department of Visual Communication Design,
Faculty of Design & Creative Industry,
Universitas Esa Unggul, Indonesia
iwan.zahar@esaunggul.ac.id

**Satya Yudha Azwir**
Department of Visual Communication Design,
Faculty of Design & Creative Industry,
Universitas Esa Unggul, Indonesia
satya.yudha@esaunggul.ac.id

## ABSTRACT

This paper offers disjunctive dissonance as a theoretical framework that integrates cognitive dissonance, disjunctivism theory, and other related concepts to enhance design education. This study uses qualitative approaches by using library research methodology proposing disjunctive dissonance as a way of thinking method into design teaching can enhance the learning experience and significantly influence student engagement in design. It introduces tension and conflict between different design elements, fostering critical thinking, problem-solving skills, and collaboration among students. Leading to more effective and creative solutions in various social design contexts.

Keywords: Disjunctive, Cognitive, Dissonance, Engagement, Perception

## INTRODUCTION

This paper is a preliminary study on disjunctive dissonance in innovating design education refers to the deliberate introduction of contradictions or unexpected elements to stimulate creative thinking and innovation. This concept is rooted in the

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principles of design disruption and the use of dissonance to challenge conventional norms and spark new ideas.

Disjunctive dissonance in artistic practices refers to the tension or conflict that arises when multiple artistic concepts or theories are applied to a single work of art, leading to a dissonant or contradictory interpretation. This dissonance can be seen as a manifestation of the pluralistic nature of art, where different art concepts, such as functional, procedural, and intentional-historical theories, are used to understand and define art.

The concept of disjunctive dissonance is particularly relevant in the context of modern and contemporary art, where artists often experiment with different styles, mediums, and themes, leading to a blurring of boundaries between traditional art forms. For instance, the use of ambiguous or dissonant elements in artworks can create a sense of tension or conflict, which can be experienced as beneficial to the aesthetic value of the work (Hazelwood 2021). Navigating artistic dissonance is a crucial aspect of artistic practice, as it requires artists to balance their inner creative vision with the expectations and pressures of the external art world.

This dissonance can manifest in various ways, such as the tension between artistic independence and the need to please and make a living, or the challenge of creating original work in a world where many artistic rules have been broken. It refers to the intentional use of conflicting elements or ideas within a piece of art to create tension, provoke thought, or challenge the viewer's perceptions (Longworth dan Scarantino 2010; Mróz 2019).

## LITERATURE REVIEW

The concept of disjunctive dissonance is not attributed to a specific proponent. Instead, it is a theoretical framework rather than a specific idea championed by an individual or group. As it integrates various aspects of cognitive dissonance, balance theory, and other related concepts. There are probably some following key figures which may have contributed significantly to the development of these theories. The disjunctive theoretical or philosophical framework originates from various philosophical and logical traditions (Byrne dan Logue 2009; Pritchard 2013). These influences have shaped the development of disjunctive theories and their applications in various fields, including philosophy, logic, and cognitive science. Here are some key sources and influences:

1. Leon Festinger: Introduced the concept of cognitive dissonance in 1957, proposing that people seek psychological consistency between their expectations and the actual state of affairs.
2. Balance Theory: Fritz Heider's concept of balance theory, which emphasizes the need for consistency and balance in attitudes, beliefs, and social relationships.
3. Disjunctive Syllogism: Immanuel Kant's exploration of disjunctive syllogisms within logical reasoning, highlighting their role in decision-making and knowledge organization.

4. Truthmaker Semantics: Kit Fine's distinction between conjunctive and disjunctive parts of propositions, which has implications for truthmaker semantics and the logic of disjunction.
5. Gricean Logic: Paul Grice's work on the role of disjunction in conversation and the use of disjunctive words like "or" in linguistic contexts.
6. Modal Logic: Influences from modal logic, which deals with the logic of possibility and necessity, and its applications in disjunctive theories of perception.

There are also arises from the field of educational theory and practice, particularly in contexts where innovation and tradition collide. Scholars and educators interested in educational innovation, design thinking, and disruptive pedagogies often discuss disjunctive dissonance. They may draw upon various theories and perspectives to explore how educational practices can be challenged and evolved to better meet the needs of learners in contemporary contexts.

Some influential figures in the broader fields of educational innovation and design education, whose ideas may relate to disjunctive dissonance in various ways.
1. John Dewey: Known for his pragmatist philosophy and emphasis on experiential learning, Dewey's ideas about education as a process of inquiry and reflection resonate with discussions on innovation and tradition.
2. Jean Piaget: A psychologist whose work on cognitive development has implications for how educational practices can evolve to support different stages of learning.
3. Seymour Papert: An advocate for constructionist learning, Papert emphasized the importance of hands-on, project-based learning facilitated by technology.
4. Design Thinkers and Innovators: Practitioners in design fields who apply design thinking principles to education, such as IDEO's Tim Brown or Stanford University's d.school faculty, explore how design processes can disrupt traditional educational paradigms.

While these figures and their ideas may not directly coin the term "disjunctive dissonance," they contribute to the broader discourse on how educational practices can adapt to technological, societal, and cultural changes, which is central to understanding and addressing disjunctive dissonance in innovating design education (Zlatev 2011).

Perceptual experiences are often divided into the following three broad categories: veridical perceptions, illusions, and hallucinations. For example, when one has a visual experience as of a red object, it may be that one is really seeing an object and its red colour (veridical perception), that one is seeing a green object (illusion), or that one is not seeing an object at all (hallucination). Many maintain that the same account should be given of the nature of the conscious experience that occurs in each of these three cases. Those who hold a disjunctive theory of perception deny this.

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Disjunctivists typically reject the claim that the same kind of experience is common to all three cases because they hold views about the nature of veridical perception that are inconsistent with it. Disjunctivism is a perspective in the philosophy of perception that unequivocally rejects the existence of sense data in certain cases. It is a fascinating view that challenges the idea that sense data exists in every case (Soteriou 2016). The idea is that there's a disjunction between appearance and the reality behind it, which is like reality is making itself perceptually manifest to someone. The disjunction is about the difference between what we see and what is there, making itself perceptible to us.

Disjunctivists are often naïve realists, who hold that when one perceives the world, the mind-independent objects of perception, such as tables and trees, are constituents of one's experience. In other cases, such as hallucinations, it seems out of the question that such objects are constituents of one's experience. It follows that on a naïve realist view, the veridical perceptions and hallucinations in question have a different nature: the former have mind-independent objects as constituents, and the latter do not.

Dissonance usually refers to the sensation of tension or discomfort created by the simultaneous presence of two or more conflicting elements. This can include different elements that do not harmonize with each other, leading to a sense of dissonance or unease in the listener or audience or spectator (Kendra, 2009; Ridenour, 2021).

Dissonance refers to the tension or discomfort that arises from the combination or clash of two incompatible elements. It is the opposite of harmony, which is the result of complementary factors (Villinez, 2019). Dissonance can manifest in various forms such as:

1. Cognitive Dissonance: A psychological term referring to the mental conflict that arises when an individual holds beliefs or attitudes that conflict with each other. This can lead to stress and anxiety.
2. Musical Dissonance: In music, dissonance occurs when two or more notes are played together and sound unpleasant. However, dissonance can be used intentionally to create tension and emotional impact.
3. Poetic Dissonance: In poetry, dissonance involves the use of words with different vowel and consonant structures, creating a harsh or unpleasant sound. This is the opposite of assonance, where similar sounds are used.

Dissonance is often used in various artistic mediums to heighten emotion, add texture, or create tension, and it can be found in everyday life, such as in relationships with unhealthy habits or conflicting beliefs (Borgoni 2016).

## METHODOLOGY

This paper is a preliminary study based on library research to find literature about the uses of term disjunctions, disjunctive, and disjuctivism. Using library research is an essential component of this preliminary study, especially when

focusing on theoretical frameworks and design practices. Library research involves systematically searching for and analyzing existing literature and resources. The study also looked at the other pairing term, dissonance, to find their connectivity and relationship that we, qualitatively believe would be useful to artistic practices and design education training. Qualitative approach method is particularly useful for understanding the theoretical framework and the experiences of designers regarding disjunctive dissonance and innovation. It allows for a deeper exploration of the concepts and their applications in teaching and studying design practices. Exploratory research for studying a relatively new concept, exploratory research will help uncover patterns, ideas, and hypotheses. Incorporating library and exploratory research to ensure that this study is grounded in existing knowledge while also providing new insights and theoretical advancements in the field of design practices.

Delimitation to this research conducted here is limited to the data available in the literature and the exploratory typically does not yet involve field data collection, which might be the limitation to the researcher's ability to capture real-world experiences and insights. This paper provide a a review of existing literature on the term disjunctive dissonance, while also exploring the theoretical framework for adapting those approaches to learning design practices.

## RESULT & DISCUSSION

The terminology "disjunctive dissonance" is not widely recognized or established in mainstream art theory or criticism, suggesting that it may be a relatively new or niche term. There is no widely recognized single individual who has specifically coined the term "disjunctive dissonance" in the context of educational theory or design education. It appears to be a concept that has emerged from discussions and writings in the fields of education, psychology, and possibly organizational theory.

The term itself combines "disjunctive" (indicating disconnect or separation) and "dissonance" (referring to a lack of harmony or conflict). It likely draws on the broader concept of cognitive dissonance, which comes from social psychology and refers to the discomfort experienced when individuals hold conflicting beliefs or attitudes.

In educational contexts, particularly in discussions about innovation and tradition in teaching and learning practices, the term "disjunctive dissonance" may have been used to describe the tension or conflict that arises when established educational methods clash with new, innovative approaches. It's important to note that concepts like these often evolve through academic and professional discourse, with contributions from multiple thinkers and researchers rather than being attributed to a single originator. Therefore, while there may not be a sole proponent or creator of the term "disjunctive dissonance," it reflects ongoing discussions and debates within educational theory and practice.

Applying disjunctive dissonance in innovating design education can be a valuable approach to enhance the learning experience and foster innovative thinking among

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students. Here are some thoughts and suggestions on the concept of disjunctive dissonance in art and design education training.

### Emphasize Analytical and Creative Thinking
Encourage students to think critically and creatively by introducing them to various design-led innovation methods and principles. This will help them develop a thorough understanding of the design-based innovation approach and its application in complex business environments.

### Foster Dissonance through Design Challenges
Design challenges can be used to create dissonance by presenting students with conflicting requirements or constraints. This will help them develop problem-solving skills and learn to navigate the tension between different design elements.

### Incorporate Real-World Case Studies
Using real-world case studies can help students understand the practical applications of design-led innovation and how it can be used to address complex business problems. This can also create dissonance by presenting students with the need to balance competing demands and constraints.

### Encourage Collaboration and Feedback
Collaborative learning and peer feedback can help students identify and address dissonance in their designs. This can foster a culture of continuous improvement and innovation within the design education environment.

### Incorporate Technology and Business Strategy
Combining design with business strategy and technology can create dissonance by presenting students with the need to balance artistic and technical aspects of design with business goals. This can help them develop a holistic understanding of design-led innovation.

### Focus on 'Design for Innovation'
Emphasizing the concept of "design for innovation" can help students understand the importance of design in driving innovation and creating value in various business contexts. This can create dissonance by presenting students with the need to balance design principles with clients or audiences' objectives.

By incorporating these elements, design education can effectively utilize disjunctive dissonance to foster innovative thinking and problem-solving skills among students. This can lead to more effective and creative solutions in various contexts, either socially or economically. Role of dissonance in design in which dissonance can be used in design to create a sense of tension or psychological discomfort, which can lead to a more engaging and memorable experience.

This technique is often used, for example, in packaging design, where small brands may leverage dissonance to stand out in a crowded market. However, it is crucial

to handle dissonance responsibly, ensuring that the aim is to tell a story rather than distress the consumer (Duffy, 2024).

## CONCLUSION

In conclusion, the disjunctive dissonance in innovating design education can be a powerful tool for fostering creativity and innovation. By introducing contradictions and unexpected elements, educators can encourage students to think outside the box and develop more effective solutions. However, it is crucial to handle dissonance responsibly and ensure that the focus remains on creating a memorable and engaging experience rather than causing distress or discomfort. Overall, disjunctive dissonance in artistic practices can be a dynamic and thought-provoking approach that challenges both artists and viewers to explore new perspectives and engage with art in a more meaningful way. Integrating disjunctive dissonance into project-based learning in design education (Halimatusyadiyah, Anasya, dan Pajri 2022; Savin-Baden 1996), for example, can enhance the learning experience by introducing tension and conflict between different design elements.

Disjunctive dissonance is a powerful tool in artistic practices, capable of creating a sense of tension and discomfort in the viewer. By exploring this concept, artists and designer alike can create new forms of expression and challenge traditional notions of art and design. The impact of disjunctive dissonance on the viewer's experience is significant, leading to a more dynamic and engaging experience as they adjust their perceptions to reconcile the contradictions.

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