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Iconographic Analysis on Intermediality Transfer of *Undagi's* Indigenous Knowledge Lexicon to Visual Cinematography

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Abstract

This study aims to investigate how the indigenous knowledge lexicon of Balinese *undagi* (traditional architects) in architecture can be transferred into visual cinematography to preserve cultural heritage, with a focus on engaging broader audiences. Employing an iconographic approach, the research analyzes the documentary *Calaccitra Undagi Mahottama: Biografi I Gusti Made Gede (1843-1940)* through three stages: pre-iconographic identification of visual motifs, iconographic interpretation of thematic meanings, and iconological assessment of cultural significance. Results reveal that Balinese architectural lexicons—such as Tri Mandala, Sanga Mandala, and CWSGR—are effectively abstracted into cinematic frames via intermediality, using symbolic natural imagery and spatial grids rather than physical structures to convey aesthetic and philosophical values. The study concludes that visual cinematography offers a potent medium for preserving architectural heritage by translating static spatial concepts into dynamic narratives, fostering continuity of traditional knowledge, particularly among younger generations, though its efficacy hinges on audience reception and contextual adaptation.

Keywords: Bali traditional architecture lexicon; *undagi's* Indigenous knowledge; intermediality transfer; cinematography; experimental documentary film

INTRODUCTION

The gradual disappearance of traditional architecture is a global phenomenon, with each nation confronting the effects of modernity on its cultural heritage (Noble, 2013). In Indonesia, a multi-ethnic country renowned for its diverse regional architectural traditions, this decline is particularly evident as modernization takes hold (Nas, 1998; Vellinga, 2021). Bali, glo-bally recognized for its cultural tourism, is no exception, as its traditional architectural values erode under the pressures of globalization and contemporary development (Noorwatha et al., 2024; Picard, 1995; Wiryomartono, 2014). Despite local government efforts to preserve these values through regional regulations (Raharja, 2021; Sitinjak et al., 2020), the process of decay persists, fueled by Bali's increasing interactions with global influences (War-

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dana, 2019). This underscores the urgent need for innovative strategies to reinforce Balinese traditional architecture as an intangible cultural heritage, especially to engage younger generations who are key to its survival.

In the current era of screen culture, the film stands out as a vital medium for such preservation efforts (Kirillova, 2018). Statistical insights reveal that Indonesia's Gen Z, born between 1997 and 2012, spends over three hours daily on digital screens, with nearly half of that time devoted to streaming movies or videos (Hasya, 2023). This trend presents a compelling opportunity to integrate traditional architectural aesthetics into visual cinematography, broadening its reach beyond specialized audiences (Genas, 2023; Quici, 2017). The connection between architecture and cinema has long intrigued practitioners in both fields, given their shared ability to shape space and time (Webb & Sborgi, 2022). The film, often a platform for spatial experimentation, both draws inspiration from and reimagines architecture, occasionally altering its essence (Vidler, 1993). As a medium, architecture communicates through material, spatial, sensory, and symbolic qualities, much like film, enabling a process of transmediality where concepts shift across forms, though not always with perfect clarity (Newell, 2021; Simonson, 2021; Vieira, 2021).

Previous research has laid a foundation for understanding this interplay. Anthony Vidler explored architecture's role in the cinematic imagination, focusing on genre and visualization (Vidler, 1993), while Miriam Vieira examined architecture's intermediality with literature, highlighting shared media traits (Vieira, 2021). Sony Wibisono investigated photography as cinematic ekphrasis in film (Wibisono, 2023), and Vieira analyzed transmediality between architecture and literary narratives (Vieira, 2019). These studies collectively underscore the potential of intermedial transfers, yet few have specifically addressed how traditional architectural lexicons, such as those of Balinese *undagi* (traditional

architect)(Noorwatha & Santosa, 2023)"properties":{"formattedCitation":"(Noorwatha & Santosa, 2023, can be adapted into visual cinematography for cultural preservation. This research fills that gap by examining the documentary "Calaccitra Undagi Mahottama: Biografi I Gusti Made Gede (1843-1940)" (CUM film), produced in 2023 by Wariga Studio under an ISI Denpasar grant. Combining disciplines like interior design, photography, and film, the CUM film profiles I Gusti Made Gede, a significant yet underrecognized Balinese *undagi* whose contributions, including the post-1917 Besakih Temple restoration, shaped architectural history (Kaler, 2007; Stuart-Fox, 2022). Initial observations suggest the film embeds *undagi*'s indigenous knowledge lexicons—such as spatial divisions and symbolic frameworks—into its transitions to enhance viewers' grasp of *undagiship*.

The novelty of this study lies in its focus on the specific intermedial transfer of Balinese *undagi*'s indigenous knowledge lexicons into documentary cinematography, offering a fresh approach to preserving traditional architecture through visual storytelling tailored to modern audiences. This leads to the research question: How is meaning interpreted in the transmediality between traditional architectural lexicons and visual cinematography in documentary films? The objective is twofold: to develop the potential values of traditional architecture as *undagi*'s indigenous knowledge lexicons within visual cinematography for cultural preservation and to search for and explore the visual characteristics of cinematography derived from traditional culture, particularly architecture, as a preservation effort. By addressing these aims, the study seeks to bridge historical knowledge with contemporary media, ensuring the enduring relevance of Balinese architectural heritage.

METHOD

This research is a case study research that analyzes CUM films as research objects. The approach used is icono-

graphy, especially in films, by analyzing the meaning of the *undagi's* indigenous knowledge lexicon embedded in the film scene. Iconography derives from the Greek words "eikon," which means "image," and "graphein," which signifies "writing." Therefore, if translated literally, iconography means 'writing images' or 'image describing' (Straten, 1994). Iconography is a qualitative method of visual content analysis and interpretation, influenced by cultural traditions and guided by research interests originating both in the humanities and the social sciences field (Müller, 2011; Panofsky, 2018). In cinema, Lawrence Alloway adapted the idea of iconography, that familiar symbols in works of art have cultural meaning beyond the context of the individual work in which they appear in the medium of cinema (Grant, 2007). In genre films, iconography refers to particular objects, archetypal characters, and even specific actors. Iconography may also refer to the general *mise-en-scene* of a genre, as in the case of low-key lighting and Gothic design in the horror film or the visual excess of the melodrama (Grant, 2007).

The methodology follows three analytical stages: (1) Pre-iconographic Analysis (Identification of Visual Motifs) – This stage involves observing and categorizing key visual elements in the film, such as architectural representations, spatial patterns, and transitions that reference traditional Balinese architectural lexicons. (2) Iconographic Analysis (Interpretation of Themes and Meanings) – The second stage examines how these visual motifs contribute to the film's narrative structure and symbolic representation of *undagi's* indigenous knowledge. (3) Iconological Analysis (Cultural and Contextual Interpretation) – The final stage situates the findings within a broader cultural and historical framework, assessing how the film communicates traditional architectural principles and their relevance to cultural preservation. To enhance clarity, Table 1 below summarizes the analytical process:

By structuring the methodology in this way, the study ensures a systematic approach to analyzing how architectural lexicons are translated into visual cinematography. This structured process allows for a comprehensive understanding of the role of *undagi's* Indigenous knowledge in contemporary media.

RESULT AND DISCUSSION

Undagi's Indigenous Knowledge As Balinese Traditional Architecture Lexicon

Balinese *undagi's* indigenous knowledge lexicons in terms of knowledge management (KM) can be distinguished as explicit knowledge that is textual based as facts, "know what" (*lontar* as textual based), and tacit knowledge as practical based that resides in people's heads, "know-how" (practical, social sensitivity, art-crafting skills and hours of work) (Noorwatha & Santosa, 2023; Wickramasinghe et al., 2009)all designers must strengthen the cultural side in still relevant designs for the modern era. In Bali, undagi's (traditional architect. One of the applications of *undagi's* Indigenous knowledge is building leveling, or in Bali is

Table 1. Stages of Iconographic Analysis in the Study

Stage	Description	Focus on the CUM Film
Pre-iconographic	Identifies key visual elements, including colors, compositions, and recurring motifs.	Architectural lexicons (*Tri Mandala, Sanga Mandala, Candi-Watu-Segara-Gunung-Rubuh* (CWSGR)).
Iconographic	Analyzes the thematic meaning of visual elements and their integration into the film's narrative.	Spatial and temporal representation of undagi lexicons.
Iconological	Interprets the deeper cultural and philosophical significance of the visual motifs.	The role of cinematography in cultural preservation.

called '*undag* (stairs)". In traditional Balinese architecture, the concept of building leveling and stairs "standard" defined by *candi* (fire*)-watu*(stone)-*segara* (ocean*) gunung* (mountain)-*rubuh (fell out; sky; outer space)* (abbr. as CWSGR) concept, that is found in *ketekan undag* or stairs elevation rules. CWSGR concept is the symbolism of the layer of the planet Earth from *candi* (inner core to mantle), *watu* (asthenosphere), *segara* (lithosphere), *gunung* (troposphere), *and rubuh* (troposphere to exosphere) (see fig. 1) (interview Anak Agung Gede Rai Remawa, 2023). The CWSGR concept is a representation of the unity of traditional Balinese architecture to the natural phenomena of its environment.

The module of the stairs dimension unit is the *amusti*, as high as the hand's grip up to the tip of the thumb, up to +15 cm. Multiple *slokas* (measurement guidance on *lontar* verse) are implemented for housing walls, and multiple '*rubuh*' are avoided (Arini & Paramita, 2021). The amount of the tread should be appropriately determined to formulate the measurement of the last tread that might fall within the proper dimension. The Balinese measurement has specific terms that are popularly used and believed by house owners. These terms are *candi* (good), *rubuh* (bad), *gunung* (good), and *rubuh* (bad), and this would be repeated regularly when the thread is more than four Fields (Suyoga, 2003).

A Balinese house's stairs *(undag)* leveling has different heights according to its function *Ashta Kosali* follows the *ketekan undag* calculation. Each of these calculations is within one fist (*sedema*), calculated after the raindrops (distance of rain falling from the wall plane), within *sedema.* For example, if the size of the *sedema* of the house owner is 10 cm and the owner wants to build a sacred building, according to *Ashta Kosali*, the sacred building happens on the house shrine (*pamerajan*) calculation (using *candi*), then for the height of the building boundary, it can be 10 cm from the raindrop, or if the *undagi* wants it higher, then counting continues until meeting the '*candi*' again; repeatedly(Mahadi & Wiyasa, 2022).

For the *Bale or Umah Meten* (southern position *bale)* building, the calculation using '*gunung*,' the *Bale Dangin* (eastern position *bale*) Building the calculation using '*watu*,' *Bale Dauh* (*western position bale*) and
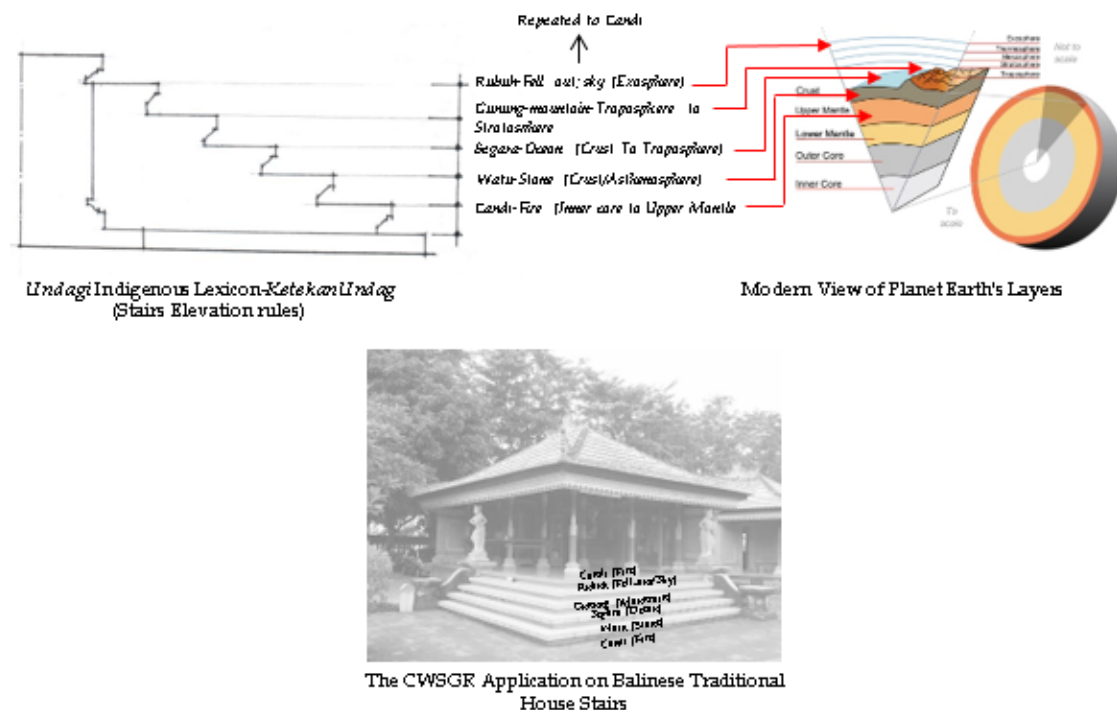

Figure 1. Position of CWSGR on Balinese Traditional House
Source: (Kemp, 2007; Suyoga, 2003)

Bale Sumanggen (*northern position bale*) the calculation using '*gunung*,' kitchen (*paon*) building the calculation using '*segara*' and granary (*jineng*) buildings the calculation using '*watu*' (Mahadi & Wiyasa, 2022). A different opinion was expressed by Pindandita Mangku Pasek Swastika, who stated that for foundations, there are traditional measurements with a height for calculation. '*Candi*' is for holy places, '*Watu*' is for houses, '*Segara*' is for alleys or well borders, '*Gunung*' is for walls, and '*Rubuh*' is not used (Suyatra, 2023) (see Fig. 2). In the CUM film, the *undagi's* indigenous knowledge lexicon is applied to *ngedum karang* (land division) concept, both division 3 (*tri mandala*) and division 9 (*sanga mandala*). It also applies the CWSGR concept which is applied to support the film's narrative and strengthens the "*undagiship*" as an indigenous knowledge mastered by the characters (interview Wariga Studio, 2023).

Pre-iconographical Description
Overview

The CUM film as an experimental documentary film (see the poster in Fig.3); has a total duration of 31 minutes 49 seconds featuring the main content, namely five speakers, namely I Nengah Januartha (Kecunduk Institute' Archivist), I Nyoman Gede Maha Putra, Ph. D (Warmadewa Research Center), dr. Anak Agung Bagus Nuartha, SPS (K) (Great Grandson-*Penglingsir* (elder) of Puri Gerenceng), Anak Agung Ngurah Yudi Arnawa, SH (Great Grandson-*Penglingsir* (elder) of Puri Gerenceng), and Prof. Dr. Ir. Anak Agung Ayu Oka Saraswati, MT (Great Grandson-Professor of Architecture at UNUD). There are also several complementary content performers, such as Jro Mangku Wayan Arta (*Palawakya-lontar* recital), I Nyoman Tri Sutanaya (Voice Over), and the singer *Geguritan* (traditional song) entitled "*Undagi Mahottama*" (made especially for
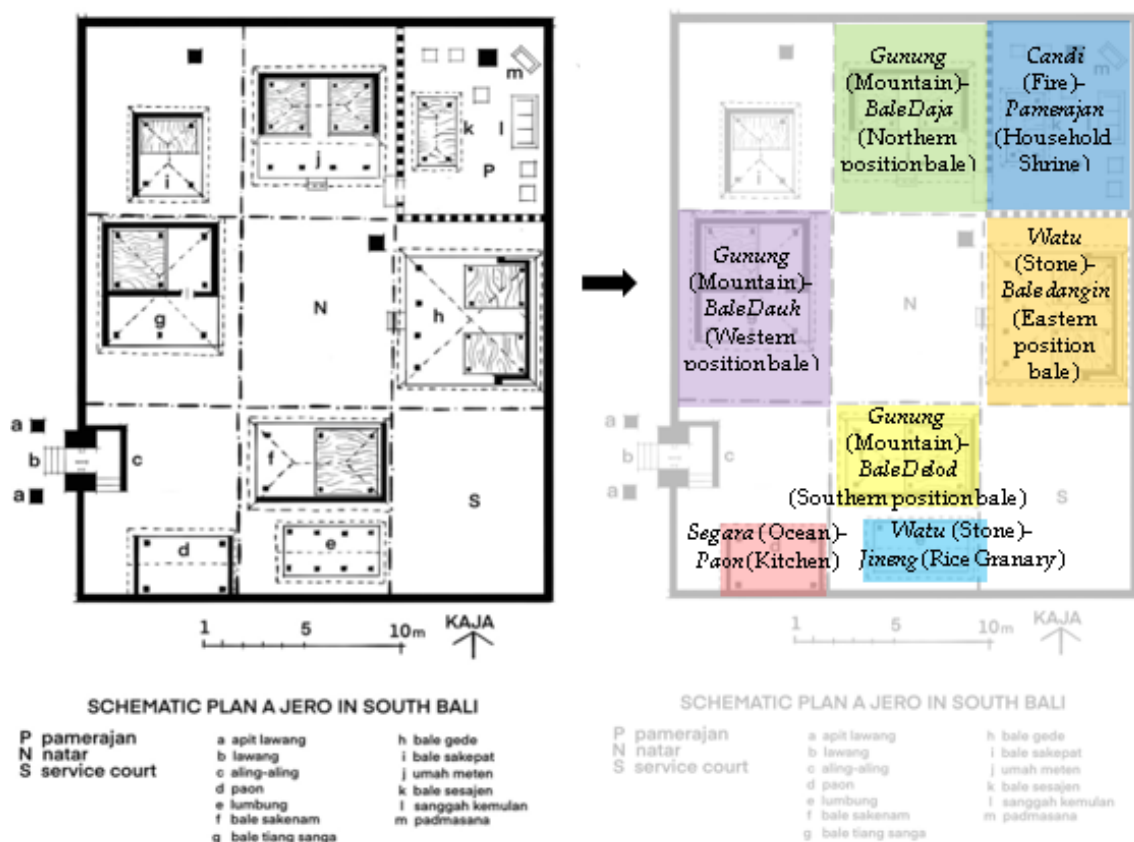

Figure 2. *Ketekan Undag* (Stairs calculation rules) Application on Balinese House Dwelling Layout. Source: adapted from (Suyoga, 2003; Tan, 1967)

films), namely Sang Nyoman Gede Adhi Santika, M.Sn. The film is also supported by the display of historical document images as a support and reinforcement of the authenticity of what the speakers put forward, as a transition during the interview.

Figure 3. CUM Film Poster
Source: Wariga Studio, 2023

Storytelling structure

The film is divided into 28 main scenes consisting of informational content in the form of 'speech' from 5 speakers, biographical narration in the form of a presentation of historical data regarding aspects of the character's biography, scoring using the recitation of traditional Balinese literary works (*Pupuh Durma*) with lyrics referring to information about *undagi*, a transition in the form of a sequential fabric of images representing the CWSGR concept. In the transition section, which is represented through visuals, the concept of land division in architecture (*ngedum karang*) is also applied by applying the spatial architectural concept of Bali, both the division of three divisions (*Tri Mandala*) and the nine divisions (*Sanga Mandala*). The storytelling structure is created chronologically by interweaving interviews, supporting images, voice-overs, and representational images of the undagi's indigenous knowledge lexicon during the transition of the film. Chronology arranges narrative points in their natural order of occurrence in time. The narrative starts at the beginning of the story and finishes at the end of the story without any deviations from the linear path (Lan et al., 2021). The chronological order of the film is linear, from the introduction of the character and his role to the contribution of the character to the development of Balinese architecture until now.

Images

The *undagi's* Indigenous lexicons used in the film are interpreted through transitional images which are applied visually in cinematography. In the *lontar Ashta Kosala-Kosali*, explicit knowledge of the *undagi*'s Indigenous knowledge is mentioned:

> *Nyan wawilangan yan angwangun babataran, wilangakna trapanya, lowirnya, candi, watu, sagara, gunung, rubuh. Yan anuju candi, ring sanggar mwang kayangan wênang. Yan anuju watu, ring pumahan wênang. dig Yan anuju sāgara wênang ring talaga mwang semer. Yan anuju gunung rubuh, tan wênang ingangge, ala dahat (*This is the calculation when making a *babataran* (floor elevation), calculating the stairs levelling and quantity, namely *candi* (fire), *watu* (stone), *segara* (sea), *gunung* (mountain), and *rubuh* (fell out; sky). If it happens to be a *candi* (fire), it can be used for a household shrine (*sanggar/sanggah*) and *kahyangan* (holy place; temple). If it happens to be *watu* (stone), it can be used for housing. If it happens to be *segara* (ocean), it can be used for ponds and wells. If it happens to be a *gunung* (mountain) or *rubuh* (fell out or sky), it cannot be used; it is very bad (Nikanaya et al., 2007).

These rules are visually translated by the filmmaker to align with the visual cinematography of the film. In the CUM film, the image aspects used are divided into *Tri Mandala* (a division of three spaces) displayed vertically, *Tri Mandala* (a division of three spaces) displayed horizontally, *Sanga Mandala* (a division of nine spaces), and CSWGR concept. In the iconographic analysis approach, three types of visual context are recognized. Three types of visual contexts can be distinguished: (1)

the form, motif, or 'gestalt' of the visual, (2) the production context, and (3) the reception context (Müller, 2011). Analysis of the form, motif, or 'gestalt' of the visual shows that the visual form of the CUM film borrows archetypes from traditional Balinese architecture. The concepts of Tri Mandala horizontally and vertically, Sanga Mandala, and CWSGR elements are translated through images representing the concept. The footage was chosen based on the consideration of the visual communication of natural phenomena as the basis of traditional Balinese architecture (Noorwatha & Santosa, 2023; Sitinjak et al., 2020)all designers must strengthen the cultural side in still relevant designs for the modern era. In Bali, undagi's (traditional architect.

The color aspect was also considered to match the costumes of the interviewees and to correlate with the previous footage. The analysis of the production context shows how the filmmaker maintains undagi's indigenous knowledge through contemporary visual presentation. Analysis of reception shows how the filmmaker's goal is to build the perception of the younger generation audience, to feel that Balinese architecture and the undagi, as its makers, are very close to natural phenomena. The balance between humans as a microcosm and nature as a macrocosm is the basic philosophy of Balinese architecture (Budihardjo, 1986; Davison, 2014; Gelebet, 1986; Noorwatha & Santosa, 2023); is tried to be shown in poetic images so that the audience understands the basis of traditional Balinese architecture implemented in astonishing natural phenomenon.

The duration of the movie section was due to adjustments to the *geguritan undagi mahottama* recital as the background music. It can be seen from the table that the '*rubuh*' icon represented by outer space has the longest duration (51 seconds) compared to the other lexicons. The function of *geguritan* as a film score is in addition to reinforcing the atmosphere of '*kebalian* (Bali-ness)' in the film and strengthening the novelty aspect in the film; by using cultural resources that are rarely used in films.

Iconographical Analysis

In the visual cinematography of the CUM film, in the previous discussion, the implementation of the *undagi's* indigenous knowledge lexicon has been presented. The iconographical analysis stage will discuss concepts, themes, and relationships between visual representations and *undagi›s* indigenous knowledge. In transmitting *undagi›s* indigenous knowledge lexicon to visual cinematography, there is a shift from the three-dimensional field in the architectural practice to the two-dimensional field in the film frame. When transferred to the field of film frames, the architectural lexicon becomes part of the visual art element with a certain aesthetic code. In Balinese traditional visual art canon, the division of fields is known as *ngedum karang* (dividing space) with the arrangement of proportions (*kekuwub*), which takes into account *Bah bangun* (ratio of length and width) of a rectangular area (film screen as an example) (Setem, 2021).

Tri Mandala Concept

Mandala (Sanskrit) means 'circle,' a Hindu concept used in Buddhist contexts to refer to various tangible objects. In practice, the mandala has become a common name for a graphic or geometric pattern representing the cosmos metaphysically or symbolically, a microcosm of the universe from a human perspective (Setem, 2021). In Balinese traditional architecture, the *mandala* is embedded with the Balinese tripartite worldview, creating a spatial grid pattern as an architectural layout (Davison, 2014; Francione, 2012). The *Tri Mandala* concept is an implementation of the tripartite organization of the Hindu cosmos and micro-cosmos, and proper spatial orientation dictates the layout of all buildings in Bali: the Gods are on high, bad spirits are in the lowest regions, and humanity comes somewhere in between. Before any structure is built, the *undagi,* or local "architect" and expert in rituals, consults the ancient and sacred building manual 'ashta kosala kosali" (Davison, 2014; Eiseman, 2011).
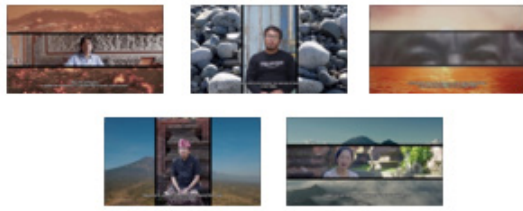
Figure 4. *Tri Mandala* (three-space division)
Concept on CUM Film
Source: Analysis (2023)

Every aspect of construction and design, following strict rules of orientation, position, shape, and size is predetermined. *Undagi*'s job is to act as an interpreter of these sacred texts to produce a building in harmony with the human body, which will be in harmony with the Balinese Hindu cosmos. Architecture, as such, is not a secular art with aesthetic or functional or decorative intent but rather a religious ritual. It is *adat* (social obligation), a vital thing, not an art form in itself (Francione, 2012). A good way to maintain harmony and balance in life is to practice the concept of *tri mandala* (*tri* is three, *mandala* is zone). This concept is used in the development and use of space, which will be divided into three zones, namely *utama mandala* (the most sacred zone) for example, temples and shrines, *madya mandala* (the transitional zone) for residential buildings, and *nista or nistura mandala* (the most profane zone), where the house animals are kept and garbage is collected (Peters, 2013).

The horizontal position of the *Tri Mandala* represents the position of sunrise and sunset in the geographical topography, which guides the orientation of architecture to the east and west (Dwijendra, 2010; Gelebet, 1986; Rai Remawa, 2015). In the CUM film (see Fig. 4), the position of *Tri Mandala* is placed at the beginning which represents the initial position of determining architectural orientation. Balinese people, especially Balinese *undagi*, are based on geographical directions in their life activities (Lansing, 1983; Swellengrebel, 1960). The tripartite partition of the universe fits with *tri angga*, which divides everything in nature into three sec-

tions. *Utama*, meaning "high" or "above," represents mountains, the gods who live there, heaven, the ancestors, and all that is pure or sacred. *Madya* the middle. *Nista* or *Nistura* means "low" or "below," and includes the sea, evil spirits, hell, the dead, the filthy, and the profane (Davison, 2014). Therefore the CUM film divides the visual cinematography frame into three which represent the aspect of geographical division of space.

The vertical *Tri Mandala* concept that represents the orientation in Balinese architecture refers to the concept of *Giri-Tasik* or *Segara-Gunung, which* refers to the orientation of the mountain as the highest point that refers to the highest point of geographical topography, and the sea as the lowest point of geographical topography. The highest point placed on top represents the north side (*kaja*) and the lowest point represents the south (*kelod*), as the orientation of traditional Balinese architecture (Budihardjo, 1986; Gelebet, 1986; Remawa et al., 2013). The meeting between *Tri Mandala*, which is divided into three vertically or horizontally, will result in the division of nine spaces, also called *sanga mandala.* The *Sanga mandala* also represents the nine cardinal directions used in traditional Balinese architectural design. *Tri Mandala*, as a concept in the film, is applied two-dimensionally, as a frame in the transition between the CWSGR concept as background, to the initial appearance of the speaker's interview or voice-over regarding the biographical narration of the character appointed as the object. The middle zone from the layout division in the middle represented *the madya mandala*, meaning transitional. In this film, the speakers are positioned as a bridge between the visuals that are displayed and the information that will be given about the characters.

Sanga Mandala Concept

The concept of *Sanga mandala* as *undagi*'s Indigenous knowledge is the meeting point of the *tri mandala* (three zones divisions) of the *kaja* (north)-*kelod* (south) axis as the Earth's axis and *kangin* (east)-

kauh (west) as the sun's axis (Rai Remawa et al., 2013). *The Sanga mandala* is a remnant of Balinese-Majapahit (*Bali Madya*) architecture, which is mostly applied throughout Bali to this day. Apart from *the Sanga mandala*, this concept of space is also called *catus patha* (crossroad) as the meeting point of the two axes (Rai Remawa, 2018).
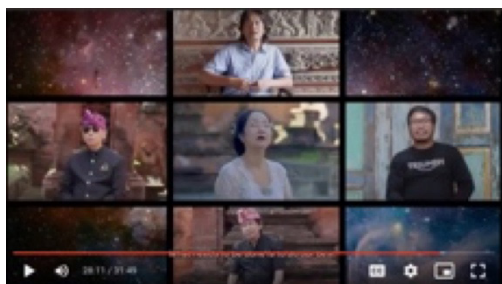

Figure 5. *Sanga Mandala* (Balinese Nine Cardinal Directions) Concept on Film CUM
Source: Author Analysis (2023)

The application of the *Sanga Mandala* concept in the CUM film (see Fig. 5); places all the sources placed and move alternately according to the direction of the clockwise rotation, as the concept of *purwa daksina* or *pradaksina* (Paramadhyaksa, 2017). The four cardinal directions, intermediaries, and central area form the Balinese compass rose (*nawa sanggaha* or *sanga mandala*). Every point is associated with a Hindu god and has symbolic and ritual associations, including numbers, colors, magical words, and mystical properties. The compass rose provides a complete foundation for architectural orientation (Davison, 2014). The clockwise rotation is interpreted as the direction of rotation in a good direction. As for the rotation opposite to the direction of the clockwise rotation, it is interpreted as the opposite. The concept of ascent is usually interpreted as a movement towards higher, holier, and better. The decline is equated to the movement towards the profane or the worse (Paramadhyaksa, 2017). In the CUM film, the concept of *the Sanga mandala* is applied to the final scene, concluding remarks. All speakers are collected in 1 frame with the division of nine fields. The speaker fills in the 5 fields, and the rest displays a background of the CWSGR concept, representing the *rubuh.*
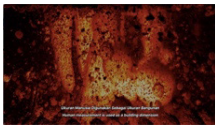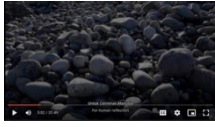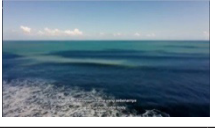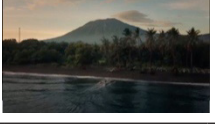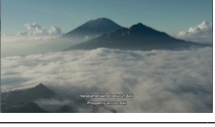
CWSGR Concept

The five *ketekan undag* or CWSGR concept divides film scenes related to the speakers' main theme of the narrative, as shown in Table 2.

As Shown in Table 2, the *candi* icon in the film's narrative represents the problem identification and problem statement sections. The *Watu* icon in the film narrative represents the formulation of the problem and the state of the art of the character of the film object. The *segara* icon immediately represents a data-based biographical narrative via voice-over. The *gunung* icon represents an empirical discussion of a character from a family perspective. The *rubuh* element represents the discourse and analysis of the work's conclusions regarding the character values of the film object.

In the CUM film, all images represent the CWSGR concept through the stages of the creation of the Earth. The correlation between CWSGR concept implementation in architecture and visual representation is an attempt to communicate *undagi's* indigenous knowledge as the film's main theme. The CWSGR concept widely applied to traditional Balinese architecture are *gunung (bale daja (north), bale delod (south), bale dauh (west), bale dangin (east), pamerajan (household shrine), jineng (rice granary) and paon (kitchen))* (see Fig. 2). In the CUM film, the duration of the *gunung* is slightly used (25 seconds) compared to the *segara* element (51 seconds). In traditional architecture, the immediate element refers to one building, namely the kitchen.

The intermediality of the element between architecture and CUM Film indicates that the filmmakers only prioritize aspects of visual representation in the use of the signed CWSGR concept. The filmmakers carried out an appropriation process from the *undagi's* indigenous knowledge lexicon, which banally represented this concept in films. Filmmakers also try to create transitions within transitions,

Table 2. Correlation Between Content and CWSGR Concept

Speaker/ Duration	Content	Image Representation	Transition
I Nengah Januartha (2.07-3.58)	The impact of the earthquake, the restoration of Besakih Temple by the Dutch, the appointment of I Gusti Made Gede as the leader of the *undagis*		*Candi*
I Nyoman Gede Maha Putra (5.06-7.12)	I Gusti Made Gede's role in restoration a legacy in the development of traditional Balinese architecture.		*Watu*
Voice Over (8.34-11.00)	Biography of I Gusti Made Gede, Parents, Wife, Children and Awards from Family Documents		*Segara*
Anak Agung Bagus Nuartha (11.24-17.45)	The work of I Gusti Made Gede at Puri Gerenceng		*Gunung*
Anak Agung Ngurah Yudi Arnawa (18.12-20.33)	The work of I Gusti Made Gede outside Puri Gerenceng and Disciples		*Gunung*
Anak Agung Ayu Oka Saraswati (20.48-21.04)	I Gusti Made Gede's Character and Contribution to Balinese Architecture		*Rubuh*
Closing Statement: All Actors	Emphasis on the character of and legacy of I Gusti Made Gede		*Rubuh*

where elements from the CWSGR concept are combined into new transitions from transitions according to the lexicon concept. The transition indicates that the filmmaker is trying to show the layers of the Earth and the process of creating nature geographically (from the inner core to the stratosphere). The filmmaker creates a subliminal message from the film's narrative by displaying elements of the layers of the Earth. The transitions show that the filmmaker creates messages within messages, all of which refer to the Balinese traditional architecture lexicon's immersion in the audience.

The CUM film has the theme' the harmony of nature' by showing footage of parts of nature ending with outer space. The theme is an attempt to inform that traditional Balinese architecture promotes balance between humans (microcosm), planet Earth (macrocosm), and outer space (metacosm). The theme is in harmony with the architectural concept and biographical narrative of the character being appointed. In visual cinematography, the concept and theme aspects of the film are woven into a unified narrative series. However, there is no written information in the film as a marker of the distribution of pressure on the law, causing the audience to be ignorant of the filmmakers' efforts to apply the *undagi's* indigenous knowledge lexicon to film visual cinematography.

Iconological Analysis

The *undagi's* Indigenous knowledge lexicon applied in the film represents an

attempt to reintroduce the *metaphysical* values behind traditional Balinese architecture to common people. The 'beauty of nature' theme and the concept of applying the *undagi*'s indigenous knowledge lexicon of traditional Balinese architecture make the CUM film's visual cinematography seem filled with alternating montages of images and architectural grid patterns. The audience is invited to explore the indigenous science of traditional Balinese architecture and obtain information about important late Balinese architectural figures.
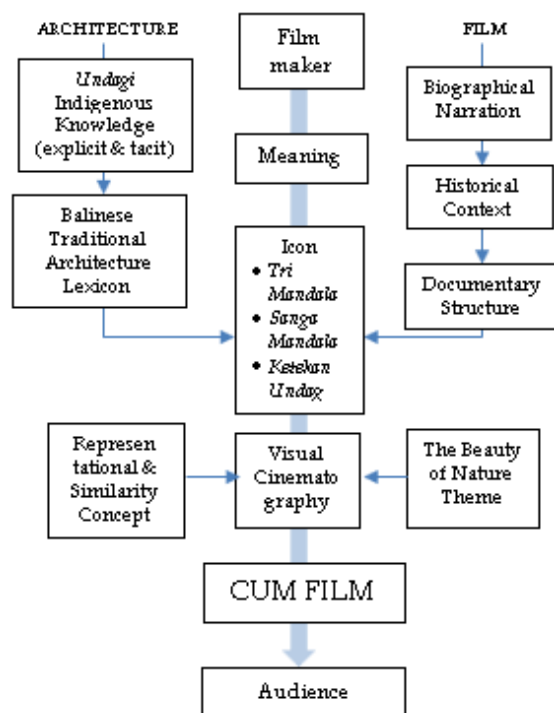

Figure 6. Intermediality Transfer Using Iconography. Source: Data Analysis (2023)

In the process of intermediality, transfer from architecture as a static media to motion-based films on CUM Film. Architecture in the film is represented as an abstraction of the concept in the form of a grid pattern of division of 3 (*tri mandala*) or 9 (*sanga mandala*), which are equally positioned as static frames in the film. The static nature of the CWSGR concept on the architectural environment is represented through a motion-based montage image representing each element. The image that represents the CWSGR concept

is similar to Newell's discussion of the iconography of the intermediality in The Handmaids' Tales (1985), which states that the concept transfers through processes of adaptation that interpret visual markers in distinct modalities, each of which emphasizes particular traits or characteristics over others (Newell, 2021). The adaptation process uses a representational similarity approach between elements of the CWSGR concept that refer to the layers of the Earth. The adaptation relates to the understanding of '*Ashta Kosala- Kosali* (Balinese architectural canon a), which comes from '*kaucala*' (Sanskrit), which means 'planet Earth floating in space' (*bale kambang*) (Rai Remawa, 2023). Its relevance is more to the depth of significance in the interpretation of the astonishing natural phenomenon elements, which are positioned as sequential montages in the form of motion-based images from the process of the Earth's geological formation to the layers of the Earth from the core to the stratosphere. The concepts of *tri mandala* and *sanga mandala* are positioned in the foreground. In contrast, the CWSGR concept is positioned as background at the beginning of the speaker's performance, becoming the main object in the transition between scenes. The motion process represents the concept of 'transience' and spatiotemporal from traditional Balinese architecture, which uses natural materials with low usage duration with a knock-down construction system, reflecting sustainability and environmental friendliness.

The film's iconicity process uses images close to Balinese nature to give the impression of 'familiarity' and 'spectacular' to influence the audience's emotions. The transitions between scenes are used as points for placing icons so that, like the stereotype of a documentary film, as Patricia Aufderheide states, a movie that is not fun, a serious movie, something that tries to teach you something (Aufderheide, 2007). The placement of the CWSGR concept with representations of natural icons is an attempt by filmmakers to avoid audience 'boredom' by watching documentaries on

historical-biographical documentary films that seem patronizing and boring. The lexicon implemented in visual cinematography in the CUM film was chosen to be a socially familiar lexicon. The *tri mandala* and *sanga mandala* concepts are architectural concepts also found in the concepts of language, cultural values, food, art, and so on (Howe, 1983). The application of this concept shows the efforts of filmmakers to prioritize aspects of familiarity to the audience. Balinese character and identity are put forward through the film without aspects of Balinese stereotyping material culture and visual art (Hasbullah et al., 2021). Filmmakers use CUM film as a methodology to convey the message that the preservation of traditional Balinese architectural values is not only through physical architecture alone. The research shows that the lexicon of traditional Balinese architecture also has the opportunity to be implemented in visual cinematography (see Fig. 6). Figure 6 shows that intermediality transfer on CUM film creates a tagging network that connects each media modality to convey a message to the audience. Communicating the message contains meaning, packaged through a network of architectural icon markings relevant to supporting the narrative in the film.

As Boyer states, film-making as a methodology is rooted in fields such as anthropology and sociology as a means for participants and viewers to explore experiences and meaning-making beyond words. It allows for a multisensory approach and contributes to a rich understanding of people and the social world from multiple perspectives (boyer, 2018). Therefore, filmmakers provide an understanding to the audience and still multiple perspectives regarding implementing the lexicon of traditional Balinese architecture in multimedia. The intermediality transfer indicates that the lexicon of traditional Balinese architecture has the potential to be developed in modern visual aspects and also emphasizes aspects of sustainability and harmony with the environment.

CONCLUSIONS

The intermedial transfer of *undagi*'s Indigenous knowledge lexicons into visual cinematography, as exemplified in the CUM film, reveals a nuanced process of meaning-making that adapts traditional Balinese architectural concepts—such as *Tri Mandala, Sanga Mandala*, and CWSGR—into dynamic visual narratives. This study illuminates how these lexicons are interpreted through abstraction and montage, leveraging culturally familiar symbols (e.g., natural imagery tied to Balinese spatial philosophy) to frame a character-driven biography, thus answering how transmediality conveys meaning across media. Rather than directly depicting physical structures, the film employs an implicit aesthetic framework rooted in Balinese principles like *ngedum karang* (spatial division) and *kekuwub* (proportion), translating three-dimensional spatiality into two-dimensional cinematic frames with poetic resonance. This suggests that architectural lexicons carry aesthetic value adaptable to motion-based media, though this potential appears context-specific to Balinese cultural sensibilities rather than universally applicable, pending broader comparative analysis.

In addressing the objective of developing these lexicons for cultural preservation, the study demonstrates their viability within documentary storytelling, offering a model where visual motifs reinforce narrative depth. To extend this potential practically, filmmakers could adopt a framework emphasizing: (1) symbolic abstraction (e.g., using nature to represent CWSGR layers), (2) grid-based compositions reflecting *mandala* divisions, and (3) transitions mirroring architectural rhythms—principles derived from the CUM film's approach. However, preservation through cinematography is not without risks; it may simplify complex knowledge or prioritize spectacle over depth, a tension unaddressed here but critical for future consideration. While the film's reach to younger, screen-savvy audiences aligns with preservation goals,

its efficacy remains untested without audience data, limiting claims to theoretical promise rather than proven impact.

Restricted to a single case, this analysis highlights one successful interpretation but cannot fully generalize the process or its preservative power across cinematography. It lays a foundation for heritage conservation beyond physical restoration, suggesting visual media as a complementary tool. To strengthen this approach, future research should test audience reception to assess cultural transmission, compare applications across diverse traditions, and explore digital platforms like interactive media for broader engagement. By refining this intermedial dialogue, traditional architecture's intangible values can find new life, balanced against the challenge of maintaining their authenticity in modern contexts.

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