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**“a minaret of light”:  
transducing the islamic  
call to prayer?**

**pooyan tamimi arab**

## ABSTRACT

In Western Europe, Muslims are increasingly demanding the right to amplify the Islamic call to prayer, the *azan*. Local resistance to the *azan* has prompted a search for technologized alternatives, of which architectural proposal to use light signals instead of loudspeakers is the only public alternative. By describing the light-*azan* proposal in the Netherlands, followed by an analysis of the extent to which it has been actually adopted, its association with spirituality is investigated from the perspective of mosque aesthetics negotiations. Aesthetic technologies of ordering physical spaces, in this case a transduction of sound into light, but also the use of glass in mosque architecture, can regulate the extent and quality of Muslims' presence in European cities. Whether the medium of light can faithfully convey the human voice, however, is bound with questions of religious authority.

**Keywords:** material religion, Islam, call to prayer, spirituality, technology, transduction, mediation

## Introduction

The idea that the truth of religion must be heard, that truth consists in the response of believers to a call, is fundamental to religions such as Christianity and Islam. Having faith means adhering to the truth of the call, and this truth is a matter of trust or submission, of being true to the call. The Islamic call to prayer, the *azan*, is of course a practical way of calling believers, but it can also be understood as a spiritual metaphor for the turn and

change in orientation that takes place in the believer's soul. This reorientation of the soul towards a transcendent good—Muslims take great pride in emphasizing Islam as monotheist in the strictest possible sense—is reminiscent of Plato's account in the *Republic* of the turning (*periakteen*) of the soul towards the good. The Platonic metaphor for the reorientation of the soul presupposes a body, which must turn to see a kind of bright light or a lantern (*phanos*) (518c). Similarly, the Qur'an repeatedly demands its believers to both listen to divine words and to bear witness to a divine truth. Studies of actual ritual practice, however, reveal that hearing cannot be so easily conflated with seeing (Erlmann 2004). This article shows that by discussing the physical transduction<sup>1</sup> of the Islamic call to prayer, from sound to light, in a European context.

The same sound can have multiple meanings that are worlds apart depending on the listener, not just in a meta-physical sense but also in the down to earth senses of the social and the political. The emergence of the amplified Islamic call to prayer in European countries is bringing hidden sentiments to the fore and creating new "soundmarks" which, like landmarks, demarcate emotional boundaries for distinct communities but do so aurally rather than visually (Weiner 2014: 163). According to a Dutch Muslim I spoke to, the problem is that "for [a believer] the call can sound like streaming water, whereas I can imagine that for local non-Muslims it can be like a cannon." The antagonistic reactions to the amplified *azan* can be better understood by focusing on the thought-provoking attempt in the Netherlands, but also France, to transduce the call into something other than sound, namely light, precisely because sound can be experienced as intrusive. In response to European ambivalence and discrimination, Muslims and involved non-Muslims are innovating to find solutions to the strained relation between Islam and Dutch society. The case of the call to prayer shows that the dialectics of recognition and negotiation can be elucidated by Birgit Meyer's concept of aesthetic formations (Meyer 2009) and, adapting her concept to the switching of media and thus bodily senses, by aesthetic transductions.

Below, I will first further introduce the topic with a brief review of the anthropology of the technologized *azan*. I then explain how the idea of a light-*azan* originated in the context of European debates about Islam. This, however, raised questions of religious dogma among European Muslims. What is the place of aesthetics, sound and innovation within Islam itself? Are alternatives such as the light-*azan* acceptable for Muslim scholars and everyday worshippers? Finally, I discuss the extent to which the light-*azan* has been adopted and associated with inaudible spirituality,

and conclude that the aesthetic transduction of the *azan* is mainly a “spiritualizing strategy” (Margry 2000: 393–4), a creative attempt to discipline Islam into publicly accepted forms of piety.

### **The Anthropology of the Technologized *Azan***

Recent scholarly literature on mosque aesthetics focuses primarily on the visual rather than aural presence or absence of Islam in Western cities. Cesari has written about mosque construction conflicts in Europe in general, signaling that increased visibility of Islam has made the religion also more “unwanted” across the continent (2005: 1018). Marcel Maussen’s study of the respective governance styles of France and the Netherlands concerning mosque construction is a helpful historical overview (Maussen 2009), together with Eric Roose’s dissertation on the plurality of existing mosque styles in the Netherlands (Roose 2009). The aural presence of Islam is often mentioned, especially the amplified call, but only in passing. In the literature on Muslim soundscapes, Charles Hirschkind’s book on cassette tape sermons in Egypt stands out (Hirschkind 2006). Hirschkind shows the primary, rather than epiphenomenal, importance of practices of hearing for Egyptian Muslims living in modern times. The importance of hearing is also affirmed in Brian Larkin’s study of how loudspeakers are implicated in religious violence in Nigeria (Larkin 2014). Other studies on the technologized *azan* also focus primarily on loudspeakers, next to radio and television.

In her introduction to *Making Muslim Space in North-America and Europe*, Barbara Metcalf noted that the lack of Islamic sounds are “a particular absence in a largely non-Muslim environment” (1996: 8). For example, Susan Slyomovics described how the Queens Muslim Center in New York City received permission to construct minarets and domes but not to amplify the call to prayer, “out of deference to the secular authorities” (Metcalf 1996: 210). John Eade described in the same volume how the East London Mosque was permitted to broadcast calls to prayer, which sparked “public debate about “noise pollution” when local non-Muslim residents began to protest” (Metcalf 1996: 223). Such demands for the amplified *azan* have in general increased across Europe and the USA in the past decade. Alisa Perkins and Isaac Weiner have recently described how Muslims in a small town close to Detroit have successfully negotiated for the right to broadcast the *azan* (Perkins 2010; Weiner 2014). In the Netherlands and Sweden, for example, mosques have made headlines in 2013 when their right to amplify the *azan* was (re)affirmed by local authorities.

Islamic sounds have been significantly recreated in private settings across the world, for example with digital *azan* clocks, which are often shaped like a miniature mosque that can set the time for the five daily prayers (Metcalf 1996: 8). Today we may add the increasing use of smartphone applications that call to prayer and often reproduce mosque architectural iconography. In an essay published in 1999, Tong Song Lee developed an argument about prohibitions on the use of the loudspeaker in Singapore, how the regulation of the amplified call to prayer determined the extent to which the Malay Muslim community was publicly present and absent, but also how listening to the call to prayer at home via the radio “reunite[d] each member of the Islamic community and create[d] an abstract communal Islamic space without the encroachment of non-Islamic social spaces” (Lee 1999: 94).

Technological advancement has affected the call because it can, for example, reduce the meaning of the *azan* to a practical function. Weiner has described how American churches faced similar issues when city clocks and pocket watches were introduced, making church bells appear “redundant and pointless” and at best “nostalgic” (Weiner 2014: 55). In Alain Corbin’s study of French church bells, the transition to modernity is described as a fundamental shift from “qualitative time” towards modern “quantitative time” (Corbin 1998: 110), a much more ordered and homogenous conception of time. From such a modern perspective, in which time is nothing more than desacralized measured time, calls to prayer can sound not only out of place but also out of time. Corbin notes that French clergy in the nineteenth century countryside were suspicious of private clocks. Similarly, as we will see, contemporary Muslim scholars are ambivalent towards the suggestion that private smartphone applications and other innovations can replace the public call to prayer, and thus make the traditional call appear old fashioned. On the other hand, Muslim scholars have also been ambivalent about technological innovation for public calls to prayer. Naveeda Khan shows how the introduction of loudspeakers in the twentieth century prompted debates in Pakistan on the question whether loudspeakers could authentically reproduce the human voice (Khan 2011). In our case-study below, the question of authenticity returns, although the idea of a light-*azan* deviates from the studies mentioned above because it is a European proposal to use “transduction” of the *azan* as a “translation,” from sound to light, rather than merely reproducing sound.

### **The Idea of a Light-Azan**

The *azan* has been heard in the streets of the Netherlands since the 1980s. Even though some mosques in cities and small towns have amplified their call to prayer for about three decades, most mosques have refrained from doing so or do so only once a week. Because the volume is usually limited so that it is audible only in the immediate surroundings, the majority of Dutch citizens rarely hear the *azan*. One of the mosques that does amplify the call is the An Nasr Mosque in Rotterdam, visited primarily by Dutch-Moroccans. The building was originally constructed as a Protestant church, but because of rapid and enduring *ontkerkelijking* (de-churching) after World War II it is now a mosque and broadcasts the call to prayer on Friday afternoons. As with most mosques in the Netherlands, the building is only recognizable as a Muslim house of worship thanks to a sign board naming the mosque and due to the Muslims who often gather in front of the building. But the amplified call to prayer proclaims the existence of the mosque in a way that is often experienced as much more pervasive than its visual characteristics.

The environment is lively, with people of different backgrounds continuously passing by on foot, and on bikes and cars. There are veiled women who just went shopping, young Dutch-Moroccan boys wearing jeans and caps, and men wearing *djellabas*. A blond-haired woman walks alongside the mosque as the *muezzin*, the one who recites the *azan*, continues to call loudly, “*hayya ‘alas salah*” (come to prayer), “*hayya ‘alal falah*” (come to your good), “*la ilaha illa-Allah*” (there is no deity except God). Adolescent school-children, wearing heavy rucksacks filled with schoolbooks, are crossing the street. A woman wearing a black veil that covers her hair and chest is cycling and takes a turn on the bike lane. A brown-skinned woman, perhaps originally from Suriname or the Dutch Antilles, passes by. Everyone is moving as if they can’t hear the call to prayer. They do not appear to be disturbed by its amplification.

And yet, non-Muslims in Rotterdam have protested mosque constructions as well as the amplified call to prayer. The protests are against the call per se, and not because one dislikes the voice or style of the *muezzin*, which is one of the responses among skeptical Muslims and non-Muslims from Muslim-majority countries. International students from Iran, for example, have told me that they think the performance of Dutch-Moroccan *muezzins* is poor. A Dutch-Tunisian Muslim said that he thought the Moroccan call was “aggressive,” which was not far from the judgment of a Dutch-Moroccan Muslim who described the Moroccan call as “severe and manly, without too many ornaments

such as the Turkish and Iranian versions [have].”<sup>2</sup> There were often complaints about the poor quality of the loud-speakers too. The same students from Iran also remarked, “of course the Dutch don’t like the call when the loudspeakers make screeching sounds.” However, conversations in Dutch about the call with people who did not grow up in a similar acoustic context, usually do not delve into these subtleties.

A few Dutch and English comments to a YouTube post about the An Nasr Mosque’s amplified call give us an impression of the anxieties that the call arouses. “Is that allowed like that, blaring like that? This isn’t normal!” Someone else asked “How could we have ever let this happen to our country!” There were also those who defended the call, but most comments in Dutch were negative, and some even threatening the mosque. During my fieldwork in 2012, more than half of the four million individuals who voted in a national election poll agreed with the statement, proposed by the Partij Voor de Vrijheid (PVV, Party For Freedom), that “the construction of new mosques must stop.”<sup>3</sup> Earlier, in 2010, the PVV’s leader protested the construction of “megamosques” and “palaces of hatred” (Tamimi Arab 2013a). The PVV came out of the 2012 elections as the nation’s third largest party with one and a half million votes (out of roughly ten million). The winner of the elections was the Volkspartij voor Vrijheid en Democratie (VVD, People’s Party for Freedom and Democracy or Liberal Party), which appointed Henk Kamp, who previously served as Minister of Defense and Minister of Social Affairs and Employment, as the Minister of Economic Affairs. Earlier, in 2007, Kamp had suggested that the Muslim call to prayer should be banned because it was not part of the cultural heritage of the Netherlands.<sup>4</sup> Such electoral outcomes resonate with what I perceived in my fieldwork,<sup>5</sup> namely that both mosques and the amplified call are widely unwanted among non-Muslim Dutch citizens.

In another district of the city, Rotterdam South, stands the Essalam Mosque. The mosque, which opened in 2010, follows a conventional dome and minaret plan. With a height of fifty meters, the two minarets are the highest in the Netherlands, but the mosque’s call to prayer can only be heard inside. Ibrahim, a middle-aged man who is a regular at the mosque, said that it is right that the mosque does not have an amplified call: “For me, the call is beautiful. A mosque should call to prayer. But it’s better not to do it here, because the others [non-Muslims] would be provoked.” Ibrahim was particularly worried about the amplified call because the Essalam Mosque had been subject to intense criticism during its planning and construction.



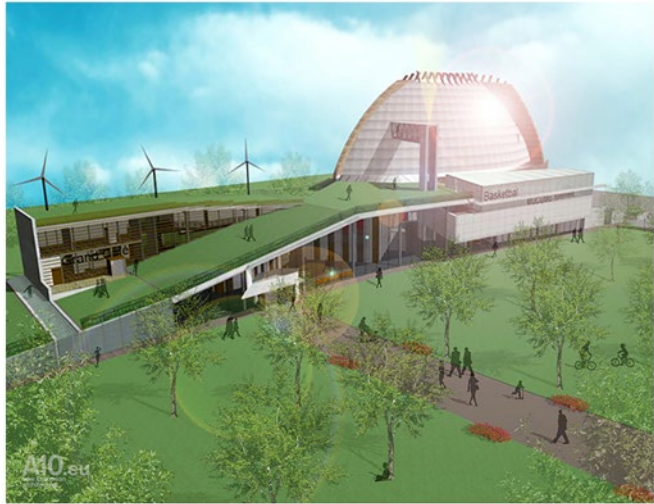
It was perhaps one of the most contentious mosques in the country as well as abroad, for example in Switzerland where minarets have recently been banned.<sup>6</sup> The Essalam Mosque's minarets were discussed on television— in both 2010 and 2012 it figured prominently in video-advertisements for the Party For Freedom's anti-Islam campaign. Moreover, the process of construction, which spanned more than a decade, had been very tedious, with conflicts within the Moroccan community and with the municipality. The building's style has been scorned by local politicians, but also by architecture critics such as Christian Welzbacher, who thinks that the "traditional" appearance of the mosque emphasizes the otherness of Dutch Muslims—it is a mosque built in the Netherlands, and by a Dutch architect, but it is not of the Netherlands (Welzbacher 2008). For Ibrahim, who did not follow these intellectual debates, the media fuss around the mosque in particular was something he was weary of. Using loudspeakers for the call to prayer would again attract negative attention to the mosque, and could provoke conflicts in a neighborhood that he described as otherwise "calm, green, and nice," a way of looking at the environment that contrasts sharply with the national perception of Rotterdam South as marginal and unpopular (Tamimi Arab 2013b).

In his polemical book *Euro Islam Architecture*, Welzbacher defends the critical approach of the design for the Poldermosque in Rotterdam (Figure 1). The Poldermosque was designed in 2003 by architecture students with a Muslim background as a more "contemporary" alternative to the Essalam Mosque (Figure 2), which they considered uninspiring and orientalist. One of the principal designers of the Poldermosque was Ergün Erkoçu. Here, we will focus on an aspect of the Poldermosque that has been neglected in debates about mosque aesthetics, namely the proposal to transduce and replace the outward call to prayer by using light. From an interview with Erkoçu about this light-*azan*, we can conclude that it can be interpreted in at least three intersecting ways—a model for discussion, a compromise and a religious experiment:

PTA: You've said that the light-*azan* is part of a "discussion model" for contemporary mosque designs. How did you come to this idea?

EE: It started in 2003 as a graduation project. Three other students and I at the Rotterdam University of Applied Sciences had the idea to design a mosque, the Poldermosque. We wanted to make something from scratch, and we wanted to redefine the meaning of "mosque." What kind

**FIG 1**  
MEMAR DUTCH architects. 2003.  
Design for the Poldermosque.



**FIG 2**  
Molenaar & Van Winden architects.  
The Essalam Mosque, Spring 2012.  
Rotterdam (Photo: author).



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of building is it, and what is its meaning here in the Netherlands, not only in its appearance but also in its functionality? If you begin from scratch and look at the functionality, what could such a building look like?

There are a few ingredients, so to speak, that are functionally necessary for a Muslim house of worship. There are specific wishes regarding the direction of prayer, ablution spaces, the fact that people take off their shoes, and usually a separation of men from women. But there are also aesthetic wishes, and we wanted to put particularly those aside and begin from the beginning.

At the time, we chose as a site the challenging location of the Essalam Mosque because there was already a plan for a mosque there. And in its appearance, the mosque was, to put it [in] black and white, “traditional,” namely with a dome and minaret. Throughout the years we have learned that this is, in fact, much more nuanced. Having a dome and minaret is not just about being “homesick.” There is much more attached to it, a sort of truth.

PTA: Yes, what are often seen as “traditional” mosque designs can for example be seen by Muslims as connecting to a transnational, “cosmopolitan” Islam, a way to religiously distinguish a community from other varieties of Islamic experience. It is tied to the phenomenon of people desiring to separate “culture” from “religion,” for example from “Moroccan” mosques in this case, which are perceived as less “pure” and “universal.”

EE: Indeed. We did not know such things at the time, but what we wanted was to juxtapose something to the “standard” mosque. But then you start thinking about the dome, and about the minaret. What are these things? Where do they come from? At the time there was a lot of discussion about a possible ban on constructing minarets and whether they were too high.

Erkoçu mistakenly thought that in the Netherlands it is ordinarily not allowed to amplify the call to prayer, and that a permit from the municipality is required for amplifying the *azan*. I explained that in the past mosque boards often did not know that there were legal guarantees for religious calls to prayer, and that they did not need a permit for amplification. In practice, mosques often chose not to use loudspeakers to avoid trouble. This uncertain situation had made Erkoçu consider alternatives:

At the same time, there are also other ways to call to prayer. There are paper timetables to see when the prayers begin. There are SMS reminders and iPhone applications. There are possibilities on the Internet that are very accurate. These were ingredients for us to take a good look at the minaret and wonder what its meaning is today and whether a mosque really needs it. We tested that for the first time when we designed the Poldermosque.

Reactions to the Poldermosque design varied. Because it was mainly meant as a discussion model, the light-*azan* proposal was not worked out in detail. Two years later, Erkoçu also made a design for the An Nasr Mosque in Rotterdam in 2005. It was (and still is) housed in a former Protestant Church and the mosque board was interested in erecting a completely new building. The mosque's amplified call had distressed those who feared "Islamization" and there was heated national debate about minarets.

Erkoçu's first sketch for a new An Nasr Mosque did not include any minarets at all, but did include an empty space for the absent minaret. The idea was to have a beam of light in the sky instead of a minaret. The "non-space of the minaret" would be provocative because it appropriates contemporary commemoration iconography, particularly that of Ground Zero in New York. However, the mosque board members who were thinking in more practical terms did not agree with this plan. They wanted a recognizable symbol, a physical minaret, and were not interested in commemoration iconography, which would have been too provocative for their needs. The discussion model had drifted too far in experimenting with religious functionality.

So Erkoçu designed a minaret that visually recalled the square minarets of Morocco, but which had new functions such as allowing fresh air to enter the mosque from the open top (Figures 3a and 3b). As in the Poldermosque design but with a more recognizable minaret, the idea now was to emanate light instead of sound for the call to prayer, and not try to replace the minaret. Furthermore, the light should be "translated," de facto transduced, from the call to prayer:

- EE: We didn't chose to call to prayer using loud-speakers, but to translate the call into a play of light patterns. The fact that the minaret is opened up from above is used to communicate with light, but also to circulate air through the building.
- PTA: How and what does the light communicate?
- EE: The live call to prayer is sung into a microphone. The electric signal is then transformed via a machine into fragments of light. We chose to use only one color, a warm white color. The frequency is directly connected to the call, to the words. In a sense one can "see" the call ... It would also be possible to translate the flickering light back into a "text" from the outside. There are already smartphone scanner applications that can do that.

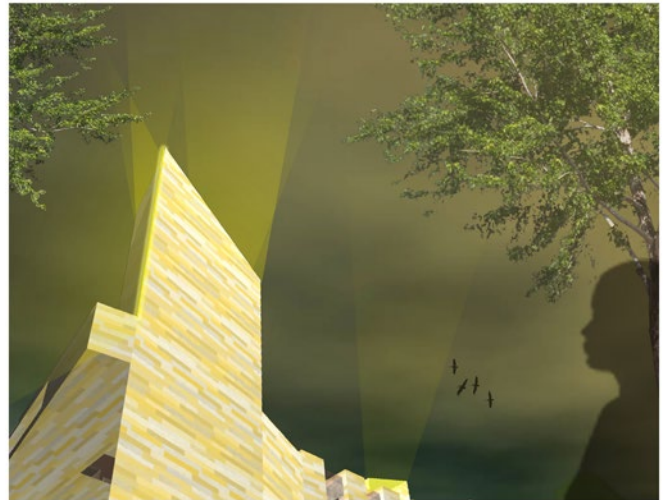
**FIG 3a**

Ergün Erkoçu, CONCEPT0031. 2006.  
Design for the An Nasr Mosque.



**FIG 3b**

Ergün Erkoçu, CONCEPT0031. 2006.  
Light-azan for the An Nasr Mosque.



PTA: But can it be seen during the day?

EE: Yes, because we envisioned to make a slit in the minaret that creates a shade so that the light could be seen. Of course, at nights it would work better.

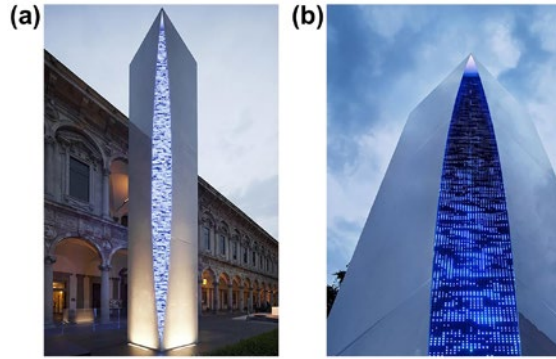
PTA: And why the warm white color, why not green, the color of Islam?

EE: We thought white would reflect an open experience. It is a pure color. Green is often used, but not very aesthetically pleasing. We also thought it shouldn't be blue or RGB disco lights, because we tried to keep the design as pure as possible.

As a discussion model and a religious experiment, the idea of the light-azan is also colored by the arts. Erkoçu

**FIG 4**

Massimo Iosa Ghini. 2011. Quattro Punti per una Torre. University of Milan.



continues to take his inspiration not just from religious iconography and architecture, but also from indirectly and distantly related artworks such as a tower installation at the University of Milan (Figures 4a and 4b), which refers back to the form of the tower but also to our technologized age, thanks to its use of LED lights. He showed me an image of the tower to explain what a light-azan could look like.

Above all other considerations, and especially at first sight, the light-azan could be interpreted as a compromise between the demand for the amplified call and local resistance to what is seen as an alien practice:

PTA: You said that you want to begin designing “from scratch,” but of course the An Nasr Mosque does broadcast the call already, and they are doing so in a politicized situation where ordinary people, sometimes even Muslims, react negatively to having the call in what is often described as a “non-Muslim country.” To what extent is the discussion model a reaction to this context? Should we interpret it as a compromise?

EE: No, no ... well, many elements of the original Poldermosque have been explained as a compromise. And that is perhaps also intended a little. The name Poldermosque comes from the Dutch practice of *polderen*, looking for an agreement, looking for a consensus. But that is then one of the questions of the discussion: Should one always look for a so-called polder-model solution? Should one always choose the middle? The design of the Poldermosque is very explicit and unique in the way it looks, so on the one hand it could be seen as a compromise, but on the other it is also very unconventional.

Reactions to the design are different every time. There are proponents and critics of all kinds and sizes. There

are those who like it or not within conservative Islamic movements, just like there are different opinions among the older as well as younger generations.

The Poldermosque is not supposed to replace all other Dutch mosque designs. It is one way to conceptualize a mosque next to several others. And we thought this model was still missing in the architectural spectrum of possibilities. When I talked about starting from scratch, I didn't think about a compromise, but I asked myself what could be done differently. You can see it as a compromise, but also as a new function of what a minaret could be. From a political perspective, when one is looking for social and political solutions, it could be seen as a compromise, while at the same time it can be functionally—qua religion—very pure.

The plans for a light-*azan* in a new An Nasr Mosque were presented in 2006 to a broad audience, including the mayor of Rotterdam, city council members and foreign sponsors. The public event was a celebration of the 30th anniversary of the An Nasr Mosque held at the Doelen concert venue and conference center. Erkoçu presented his design alongside speeches by the mayor and the famous Muslim scholar Tariq Ramadan. The mosque board members approved of the design and were especially sympathetic towards the idea of building a new mosque from the ground up, but in the end the project turned out to be too expensive and so they opted instead for a more modest renovation, to be carried out by the Dutch architect Rokus Visser.<sup>7</sup> The unrealized idea of a light-*azan*, however, has slowly spread to other parts of the Netherlands, and has come up in France as well, where the Marseille Grand Mosque which is currently under construction will have a minaret that lights up specifically for the call. In 2009, the year of the Swiss minaret ban, the *New York Times* stated that

The minaret of the new Grand Mosque of Marseille, whose cornerstone will be laid here in April [2010], will be silent—no muezzin, live or recorded, will disturb the neighborhood with the call to prayer. Instead, the minaret will flash a beam of light for a couple of minutes, five times a day.<sup>8</sup>

### **Glass and Light**

Ideas such as the light-*azan* and related elements such as the use of glass and the color white in order to be more “open” have impacted Dutch mosques and their aesthetic negotiations. Almost a decade after the first Poldermosque design, Oskar Verkaaik noted that young Muslim students

in the city of Almere held the view that a “minaret of light” could, in theory, replace the constructed minaret. They liked the idea of a minaret “with lots of glass” which would make it “light and transparent” (Verkaaik 2012: 168). Light from the outside would enter the mosque through the minaret during the day, and at night the light would emanate from within the mosque. To what extent have such ideas been realized, and how is the discussion about the light-*azan* evolving?

The Al Ansaar Mosque in Delft is based on a design similar to the one described by Verkaaik—the minaret can light up in green on special occasions and is made of brick and glass. One way to make a mosque appear more “Dutch,” it is thought, is to use brick. The elaborate use of bricks in mosques has of course a centuries-old history in countries such as Turkey and Iran, but they are chosen in the Netherlands because they are reminiscent of Dutch architecture. In Delft, I talked to a former board member of the mosque about the use of light and the call to prayer. Not only was he a *hafiz* (someone who can recite the Qur’an by heart), he told me that he had also performed as a muezzin and that his son was the building’s architect, an achievement of which he was very proud. Some of the non-Muslim residents in the neighborhood had visited the mosque on open days, and had heard the call inside the mosque, but there was no amplified call: “No, we don’t broadcast the call. It would create trouble, but you know what, I will have a conversation about this again with the mosque’s board. Maybe we should have an amplified call.” It became clear to me that the use of light here had in no way replaced the need for a call. Merely being asked about the call prompted the man to reconsider its absence, and to acknowledge that the only reason was fear of aggravating the neighborhood.

In another small town, Hoofddorp, a minaret in the Ar Rahman Mosque was constructed entirely out of glass. This minaret functions at the same time as a shaft for the elevator provided for elders, an idea that Erkoçu had already presented in his Poldermosque design, and that has also been applied to the bigger Ulu Mosque in Utrecht. There was local resistance to the Hoofddorp mosque when it was being built, and while granting permission for construction in 2006 the municipality stated that “the plans do not include sound sensitive realizations.” During a public meeting to explain their plans, one of the mosque’s board members, Donald Karamet Ali (of Surinamese descent, † 2011), expressed his regret that local residents had not shown up. He assured the municipality and the local media that the mosque would not amplify the call to prayer, but use “light signals” coming from the “transparent,” glass minaret.<sup>9</sup> This was necessary



to preserve the peace with our neighbors ... We [have] already [been located for] fifteen years in a residential area and have never had any trouble. But if we would use a sound installation, that would be assisting those who support people like Geert Wilders and Ayaan Hirsi Ali.<sup>10</sup>

A chairman of an overarching Dutch Islamic organization, Arslan Karagül, gave his support for the light-*azan*: “I find it an enlightened solution [*een verlichte oplossing; sic*] in more than one way. It will not change the meaning of the call to prayer.” Karagül also thought that in every town the local context should determine whether or not the *azan* is amplified.<sup>11</sup>

I visited Hoofddorp’s Ar Rahman Mosque (Figure 5) in 2012 and had a conversation with Atef, a man of Egyptian origin who spends much of his time at the mosque. He was happy to give me a tour of the mosque, which had been completed only a year ago. Atef was enthusiastic about the mosque’s facilities and the decorated prayer space, but he had no idea about the light-*azan*. The glass minaret also does not light up, contrary to other mosques in the Netherlands that have this feature. For Atef, it was mainly



**FIG 5**  
The Ar Rahman Mosque, Fall 2012.  
Hoofddorp (Photo: author).

the minaret elevator that was important because it was helpful for an elderly friend.

Moreover, the use of glass and the metaphor of transparency should be taken with a grain of salt. In my conversation with Erkoçu, I broached the subject of the extensive use of glass: should it be seen as a religious innovation that has been provoked by European political pressures? For example, Wael Farhat, a Muslim mosque architect in Italy, told me in an interview I conducted in Venice that he used a lot of glass because he thought it stood for a more pure, universal Islam. At the same time however, he talked about pressures from Italians who were against mosque construction. It was my impression that he did not want to admit that his mosque designs, and his concepts of transparency and a cosmopolitan Islam, were strongly influenced by local politics. In reality, alternative conceptions of Islam as well as local political pressures intersect and shape the final design. Erkoçu's own explanation was that an architect who wants to promote his design needs to use a language that is understood by non-Muslims:

We also used a lot of glass for our design of the Poldermosque and explained it every time [by saying] that there is nothing to hide, that it's open, while actually we made the prayer space very closed because that is something personal. Because when one passes by a church, it's not like you can see the people praying inside. And that is something that is being used in the discourse surrounding the acceptance of mosques, that they are closed. But it makes sense that they are closed off.

Indeed, the idea of a light-*azan* or the use of new materials such as glass has not fundamentally altered the traditional meanings of the call or what is, from the perspective of a religious minority group, the private, secluded experience of prayer. Kareem, a young Muslim intellectual who lives in Rotterdam, told me that he thought the physical effect of using light signals to call to prayer would be different, and thus also its religious meaning, particularly "because the function of sound is to make one turn towards the call, whereas a light-*azan* is something that one is confronted with when already facing that direction." As I have already mentioned, for Plato the reorientation of the soul was explained with an optical metaphor, but this may not always capture the importance of techniques of listening in Islam that enable believers to become "auditory receptacles of divine speech" (Hirschkind 2006: 39).<sup>12</sup> Moreover, we could also reject the stereotypical opposition of seeing versus hearing, and say that what is lost without sound is a part of the synergetic experience of the mosque building itself.<sup>13</sup> Kareem was not against the idea of a transduction, but was skeptical about its possible value as *azan* in practice. The amplified call turns the mosque into an actor and people

into objects of its attention; would the light-*azan* mosque not lose agency in the process of transducing the call?

It is worthwhile to distinguish the related discussion on glass from the light-*azan* in terms of the production of actors and their objects of attention. The material specificity of glass and the concomitant social idea of transparency create outsider subjects who are less sharply excluded from the mosque building. Muslims inside must perform their prayers while being (potentially) watched, in order to become more trustworthy to a skeptical, non-Muslim society. The light-*azan*, however, “rescues” non-Muslims outside the building from being touched by unwanted religious sounds and in that sense disempowers the mosque. In other words, different materials and strategies are used and form different power relations: the transduction is a transformation of hierarchies. However, that does not mean that Muslims themselves wholly reject the use of light and glass, because of different interpretations and experiences of material religion. Kareem did indeed say that he considered the effect of light important for generating an aura of “spirituality”: “When I drive by the Essalam Mosque at nights and see that it is lit up, I feel something, a pleasing sense of spirituality.” Erkoçu had also told me that he intended the use of light to enable a “spiritual” experience for mosque users.

### **Spirituality and Religious Authority**

Puzzled by the varied reactions to the light-*azan* proposal, I arranged a meeting with three scholars at the Islamic University of Rotterdam. One of the questions I put forth was whether it was religiously valid to translate the human sound of the call into light patterns. Suat, one of the young teachers working at the school, immediately came up with the word “compromise.” When I pressed further and asked him if he was sure that a light-*azan* should be interpreted as a compromise, he replied that perhaps it was not even a real compromise, in the sense of being fair, but “a necessary solution.” His senior, Gamal, did not like the idea. He believed that the technologization of the call was dangerous because its long-term effects could not be predicted. “The roots of Islam,” he said, “could be undermined and the *azan* could lose its importance. I am afraid that the *azan* will not stay in the hearts of Muslims.” Gamal viewed the light-*azan* as he did the broadcasting of the *azan* by radio and the Egyptian government’s desire, before the 2011 revolution, to replace the cacophony of numerous *azans* with a unified master *azan* in Cairo. He disapproved of all these innovations as either too mannerist or too modern.

The younger Suat was slightly more positive about the proposal, particularly because he thought it would be less threatening to non-Muslims. Both scholars said that in “non-Muslim countries” such as the Netherlands and France, it would be wise if Muslims did not challenge their environment too greatly. Muhammad, the third scholar who participated in the meeting, added that, after all, the call to prayer had historical ties to a sense of victory and conquest and that today this could be viewed as problematic. The scholars agreed that the decision to amplify the call should depend on the context; they thought it would be more appropriate in a neighborhood with a significant number of Muslims, or in a very “multicultural” one. Moreover, they thought that amplifying the *azan* in the afternoons was not a practical necessity, since most people visiting mosques during weekday afternoons are elders who do not require the *azan* to be on time for their prayers.

Muhammad said that Muslims should not seek recognition through a demand to amplify the *azan*:

We must not force people to recognize us. That will cause pain and resistance. We must look for other ways to be acknowledged ... we should engage in dialogue and explanation, but not in force. We could base ourselves on the law and demand our legal rights, but there is at the same time a social reality, the fact that people are not used to the *azan*. One must take this into account and behave pragmatically.

Gamal added that the history of the *azan* and that of church bells should be considered in judgments regarding the Dutch case. Although the law in the Netherlands is interpreted to equate the *azan* with church bells, he and the others thought that in reality it was slightly different because of the use of words and a specific spoken language. “Could we perform the call in Dutch? What would that mean?” For them, the red line of recognition was not the call, but first and primarily the right to construct recognizably Islamic mosques.

“Can the light-*azan* be seen as a “spiritual” translation of sound into light?” I asked, to see whether a reference to spirituality could authenticate the light-*azan* in religious terms. In the Netherlands I had not heard of any Qur’anic interpretations to defend the light-*azan*, but the word “spiritual” had been mentioned. Interestingly, according to Maxime Repaux, the architect of France’s Marseille Grand Mosque (Figure 6), French Muslims interpreted the spiritual aspect of the light-*azan* by referring to the Qur’an’s verse on divine light.<sup>14</sup> Verse 35 of the *Surat an Nur* goes as follows:

Allah is the Light of the heavens and the earth. The example of His light is like a niche within which is a lamp, the lamp is within glass, the glass as if it were a pearly [white] star lit from [the oil of] a blessed olive tree, neither of the east nor of the west, whose oil would almost glow even if untouched by fire.

**FIG 6**

Bureau Architecture Méditerranée.  
2008. Design for the Marseille Grand Mosque.



Light upon light. Allah guides to His light whom He wills. And Allah presents examples for the people, and Allah is Knowing of all things.

According to Repaux, the use of light symbolizes “a passage from the material to the immaterial,” towards the “spiritual,” from stone to sound, and from sound to light. During the interview he mentioned a very similar design for a mosque in Algeria that aims to be one of the largest mosques in the world, which has a minaret that can function as a “lighthouse,” though not one that would replace the *azan*. There are also other mosques that use light — the Hassan II Mosque in Casablanca, for example, has a 210 meter-high minaret that can shoot a green laser beam towards Mecca, and the 600 meter-high Mecca Clock Tower blasts unprecedented glittering light upon the holy center of Islam — but none of these are meant as transductions/translations of the call to prayer. The passage to light is portrayed as a passage from the material to the less material and therefore spiritual, whereas, both sound waves and light rays belong to the domain of physical phenomena. Following Webb Keane’s discussion of the religious work of transduction, we can say that the *azan* is first materialized as sound, but then “dematerialized” as light, which is, in fact, a rematerialization (Keane 2013: 2). A similar notion of “spirituality” as a transcending of the material, or even a denial of the material, can be found for example in classical Islamic philosophy, such as Ibn Sina’s *Treatise on Love* (Fackenheim 1945), and also abounds in Protestant theologies. The point that I want to make is not genealogical, but that even though religious reasoning may deny materiality, in reality quite the opposite can be the case.

Repaux admitted that the idea of the light-*azan* had also come up in France—“to keep the neighborhood happy”—because of great resistance to the mosque. He claimed

that the light-*azan* did not have any opponents and is often considered an interesting approach for preventing conflict. Yet despite these intentions, significant local opposition to the very idea of building the mosque led the city to cancel the project's construction permit; the cancellation had to be overturned by an appeals court in 2012 before the first stone could be laid.

In Rotterdam, Gamal thought it was strange to want to replace the *azan*. "It belongs to the Islamic tradition, but it is much more than just that, it is a part of Islam and mandatory inside a mosque." Though initially sympathetic, Suat also thought the idea of a "translation" was awkward:

It would be good if one could actually read the words of the call if they were to be projected, but still ... if we start doing this then maybe in the future one will argue that a [particular] piece of a pig can be eaten and another piece cannot.

Gamal added that the *Surat an Nur* refers to a spiritual, divine light, and that the intention of the Qur'an was in no way to equate physical and divine light, and certainly not as a replacement of the call. Moreover, being allowed to translate the words and Arabic language cannot be simply taken for granted, as these are of importance to the sacred character of the *azan*.

The conversion from one sensorial dimension to another, the transduction, just like the translation of a text, raises issues of accuracy and authenticity. In order to be experienced as authentic, and immediate, a medium must erase itself: "Can light as a medium faithfully convey the human voice, without its own specificity coloring the process of mediation to an unacceptable degree?" (Patrick Eisenlohr, private correspondence; also see Eisenlohr 2009). The question of immediacy is bound with that of religious authority. For a scholar of religions it is revealing to analyze religions as media, recognizing the interwinement of sensational forms and theological content, but for a religious Muslim scholar such as Gamal it is important to distinguish Islam *from* media, although without denigrating rituals as inessential. A successful process of mediation, from a worshipper's perspective, requires that a religious practice be experienced as immediate. In other words, Isaac Weiner's observation that religious sounds are socially accepted when they fade into the background and go unnoticed (Weiner 2014: 206) also holds from the intra-religious perspective of Islamic authority which, in the twentieth century, has widely come to accept the immediacy of a call broadcast on loudspeakers. The key question, therefore, is whether the transduction of the *azan* can ever be experienced as an immediate, spiritual way of calling to prayer.

Although they had doubts about the light-*azan*, the Muslim scholars in Rotterdam could easily accept the link between “spiritual light” and the call to prayer. Indeed, many scholarly accounts of the minaret across the world describe it as originating in a lighthouse, and its development is widely seen as intertwined with that of the call to prayer. Butler (1880), an English historian, published an article in which he defended the hypothesis that the minaret developed from an antique lighthouse. The German orientalist Friedrich Schwally suggested that the use of the Arabic word *manar* to describe the minaret was related to the practice of the muezzin holding a light, for instance an oil lamp, while reciting the call (Schwally 1898).<sup>15</sup> The Iranian philosopher Seyyed Hossein Nasr has also stated that the connection between the call to prayer, the minaret, and light is valid. In his book *Islamic Art and Spirituality* Nasr writes of the call from the minarets emanating a divine, spiritual, light unto the city:

It is certainly not accidental that the place in the mosque from which the Word of God in the form of the call to prayer reaches the community, namely the minaret, is called in Arabic *al-manarah*, literally the place of light.

The message of Islam, its language, is not just contained in sound; the revealed word is “a light which shines upon the otherwise dark path of human existence in this world” (Nasr 1987: 51). However, Muslim scholars often deem the intentional replacing of sound by light unacceptable. The influential Egyptian Al Azhar University has already declared that the light-*azan* cannot replace or translate the call to prayer in Marseilles, and that Muslims should inform French citizens of the importance of the call.<sup>16</sup> In this case, the connection between the spiritual and the political compromise was too direct and too close, while the deviation from tradition was too great.

### **Conclusion: Spiritualizing Strategies and Pluralism**

To conclude, I want to make a general comment on spirituality in modern, pluralist societies. Peter van der Veer has argued that “the gradual transformation of a transcendent hierarchical order into a modern egalitarian immanent order has displaced institutional religion, while freeing a space for spirituality” (2008: 790). This free space allows for peaceful interactions between worldviews: “an embracing, vague term like spirituality has been adopted precisely to make peaceful communication between different conceptual universes possible” (2008: 793). Such dialogue is much welcomed in highly diverse settings. However, the implementation of the light-*azan* shows that in

daily practice the relation between freedom and spirituality can also be one of religio-aesthetic negotiation, spatial struggle and political compromise. Thus, the light-*azan*, and spirituality in general, have a disciplinary aspect; as Weiner put it, they “[discipline] religious adherents into practicing more restrained forms of piety” for the sake of “public order” (Weiner 2014: 73). This prompted Tariq Ramadan to once exclaim at Erasmus University in Rotterdam that spirituality, often proposed as a kind of Sufism, is not a final answer to the question of living with difference, though it could be one among others. Similarly, the light-*azan* cannot solve the problem of Islamic sounds in a Muslim-minority space, but it can be one among several options to address the issue. Architects like Repaux and Erkoçu use the language and iconography of spirituality to open up new religious possibilities, as elucidated by van der Veer’s analysis. Such “spiritualizing strategies,” however, are not new (Margry 2000: 393–4). For centuries, Dutch Catholics held silent processions, prayed in clandestine churches, and could not ring the *angelus* call to prayer. Through innovations such as the silent procession (*stille omgang*), they kept the memory of the abundant procession alive. These silent processions functioned as an immanent protest against religious intolerance from within a religious tradition. Similarly, the acceptance among some Muslims of the aesthetic transduction of the *azan* is not merely tied to a desired spiritual experience but is in fact a spiritualizing strategy, an attempt to balance religious obligation on the one hand and compromise with local situations on the other.

During my interviews, when I would show Dutch Muslims pictures of New York’s Empire State Building lighting up

**FIG 7**  
2008–2013. Önen  
Architecten. Design for the  
Ulu Mosque in Utrecht.





**FIG 8**

2014. Erdal Önder, ENA Architecten. Design for the Turkish Cultural Center in Enschede.



green to celebrate the end of Ramadan, they reacted with enthusiasm and awe. And yet, the idea of using light in a light-*azan* here in the Netherlands often met with great reluctance. The first was a clear sign, literally, of recognition, powerfully palpable for those who were aware of the Empire State Building's subtle role in New York's everyday life; the second was mainly a sign of negotiation. This is an ongoing process: the recently constructed Ulu Mosque in Utrecht (Figure 7) has glass minarets and even a silent room for members of other religions, making space for a plurality of spiritual experiences. But even before its opening, voices have been raised in protest against a possible amplified *azan* in Utrecht, with suggestions that a smartphone application could replace the public call. The same holds true for the planned mosque in Enschede. At the time of writing, construction had not begun but there were already disagreements over the *azan*. The remarkably unorthodox design, revealed to the public in 2014, uses a lot of white surfaces and glass which are to be lit at night. The architect, Erdal Önder, explained that the building will have a very "open" and "inviting" aura (Figure 8).<sup>17</sup> And in contrast to the Empire State Building's allegiance to New York City's religious diversity, the Mevlana Mosque in Rotterdam has been lit up in orange to celebrate the Dutch soccer team, performing its allegiance to the nation. These examples show that Muslims of diverse backgrounds are sensitive to aesthetic formations, creating a common, cosmopolitan, European ecumene for Islamic architecture. At the same time, ordinary worshippers rarely embark on the avant-garde style of questioning that motivates architects like Erkoçu. This can lead us to questions regarding the relationship between recognition and compromise, and between religious experiences and their regulation, through aesthetic technologies of ordering physical spaces, shaping what we see and hear in private as well as in public domains.

For the ordinary worshipper, the call for the amplified call in the Netherlands and Europe remains alive and well. It

asks non-Muslim hearers to be certain kinds of people, who accept the public presence of Islam, visually and aurally. Such ethical calls, as Plato envisioned, reorient our soul. For contemporary philosophers who have criticized cultural racism<sup>18</sup> and European xenophobia, militant as well as silent calls have a circular relation with the subjectivities that they shape (Critchley 2007); responding, or not responding, to such calls determines who we are and, perhaps more importantly, who we want to be.

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## notes and references

<sup>1</sup> By transduction, I mean here to alter the physical nature or medium of a religious call, or more perhaps more abstractly a religious "signal." To convert its pattern into corresponding patterns in a new medium is to transduce it. Silverstein (2003) and Helmreich (2007) have used the term in relation to cultural meaning and translation. Keane (2013) employs it to describe how the "religious work of transduction" can use materiality to create the impression of dematerialization. These different characteristics of transduction—the production of meaning, the possibility of cultural or religious translation, and dematerialization—intersect in this article in relation to the conversion of the call to prayer from sound to light signals.

<sup>2</sup> Moroccan ritual practices of Islam have prompted anthropologists of Islam, Clifford Geertz

and recently John Bowen, to use words such as "aggressive" and "patriarchal" in their descriptions. Geertz: "Islam in Barbary was—and to a fair extent still is— basically the Islam of saint worship and moral severity, magical power and aggressive piety, and this was for all practical purposes as true in the alleys of Fez and Marrakech as in the expanses of the Atlas or the Sahara." (1971: 9). Like Geertz, Bowen contrasts Moroccan and Indonesian Islamic practices and describes the former as "patriarchal," for example in the case of the ritual sacrifice of an animal, which in the Moroccan case signifies the "virility, power, and self-sufficiency of the male, as opposed to the female." (Bowen 2012: 83) Geertz's use of the term "aggressive" may be problematic, but not wholly disconnected from Bowen's descriptions of "patriarchal" practices.

<sup>3</sup> [www.stemwijzer.nl](http://www.stemwijzer.nl). Statistieken 2012 Tweede Kamerverkiezingen.

<sup>4</sup> 'Geen gebedsoproep via luidspreker.' [No call to prayer through loudspeaker.] *Algemeen Dagblad*, March 28, 2007.

<sup>5</sup> For example in the small town of Deventer where residents got into heated arguments with the Center Mosque, in 2012 and 2013, about amplifying the call on a daily basis.

<sup>6</sup> Swiss Ban Building of Minarets on Mosques. *The New York Times*. November 30, 2009.

<sup>7</sup> [www.rokusvisser.nl](http://www.rokusvisser.nl)

<sup>8</sup> French Mosque's Symbolism Varies With Beholder. *The New York Times*. December 27, 2009. Also see the mosque's website: [www.lamosqueedemarseille.com](http://www.lamosqueedemarseille.com).

<sup>9</sup> Nota van Burgemeester & Wethouders [Note of the Mayor and Executive Board]. 25 April 2006. Registratienummer 2006 I 13038. Gemeente Haarlemmermeer.

<sup>10</sup> Ayaan Hirsi Ali is a former member of the House of Representatives on behalf of the Liberal Party (VVD). She made the film *Submission*, a highly controversial critique of Islam, together with Theo van Gogh, who was murdered by a radical Muslim.

<sup>11</sup> Moskee gaat gelovigen met lichtsignalen oproepen [Mosque will call believers by light signals]. ANP. February 16, 2005.

<sup>12</sup> Isaac Weiner has documented a comparable understanding of Christian calls to prayer, when a man defended the right to ring church bells in court, saying: "I do not know anything more touching or more thoughtful than that arrestation, even for a moment, which a man will involuntarily make when he hears these bells, reminding him that the Saviour took upon him our flesh for our advantage" (Weiner 2014: 62). Precisely because of the element of hearing the call involuntarily, creating a public community of listening religious subjects, it could never be replaced by pocket watches.

<sup>13</sup> William J.T. Mitchell defends the interesting thesis that "all media

are mixed media" (2005: 260). There are no purely visual media, but also no purely auditory media: synergy is always part of aesthetic formations. This observation does not foreclose the possibility to distinguish visual from auditory media, but reveals that a phenomenon such as the call to prayer tradition from mosque buildings is much more than merely an auditory experience. It is, for instance, also experienced as tactile.

<sup>14</sup> I contacted Repaux in 2012 and fellow anthropologist Corina Duijndam interviewed him for me by videocall.

<sup>15</sup> More recently, Robert Hillenbrand has argued the contrary, namely that in the early Islamic period the word *manar* was semantically disconnected from fire or light, and that it indicated a place that could signal without the presence of a literal light signal (1992: 132).

<sup>16</sup> Azhar rejects light adhan. *The Siasat Daily*. March 8, 2012. [www.siasat.com](http://www.siasat.com).

<sup>17</sup> Dit is 'm dan, de nieuwe moskee in Enschede. [Here it is, the new mosque in Enschede.] [www.tubantia.nl](http://www.tubantia.nl), February 18, 2014.

<sup>18</sup> Alan Badiou. Le racisme des intellectuels. *Le Monde*. May 5, 2012.

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