The Dream Will Tell: Militant Muslim Dreaming in the Context of Traditional and Contemporary Islamic Dream Theory and Practice

Iain R. Edgar
University of Durham

Al-Qaeda and Taliban leadership and membership appear to have been motivated, inspired, and guided by certain dreams. Their understanding of dreams seems to draw at least partly on traditional and contemporary Islamic dream theories. If this hypothesis is correct, then there is a need for the urgent study of Islamic Jihadist political/religious conversion and guidance dreams across the Middle East. The dream—as experienced, reported, and interpreted—is now a significant aspect of the global conflict between Al-Qaeda and its associates versus the core value system of Western civilization.

KEY WORDS: dreaming; Islam; Al-Qaeda; Taliban

This article, given the obvious data collection problems, attempts to sketch an assessment as to whether some of the Al-Qaeda and Taliban leadership and its members are and have been motivated, inspired, and apparently guided by certain dreams and whether their understanding of dreams draws on traditional Islamic dream theories.

The dream has a special status in Islam, as the Koran is said to have been partly revealed to the Prophet Mohammed in dreams, as well as in visions (Machatschke, 1995, p. 3); Muhammed is thought to have made his famous “night journey” or Lailatal-Miraj to Jerusalem in a dream (Coxhead & Hiller, 1990). In this night journey he is believed to have seen the secrets of the cosmos. Within Islam there is a range of understandings as to the nature of this sacred journey, ranging from that of less fundamentalist Muslims who perceive it to be a divine dream to some Muslim sects who view it as a concrete trip. Gouda (1991) described this apparently momentous journey as follows:

The vision in question was the ascension of the Holy Prophet: he was transported from the sacred Mosque (of Makkah) to the Al-Aqsa (the farthest) mosque (of Jerusalem) in a night and shown some of the signs of God. The Hadeeth [sayings and traditions of the Muslims’ Holy Prophet] gives details of this night journey wherein the Prophet was first

This article was first presented at the 2003 “Pakistan Workshop: Islam in South Asia” held at the Rook How, Satherthwaite, Lake District, United Kingdom. I am very grateful, particularly to Stephen Lyon, University of Durham, and workshop organizer, who encouraged me to write my ideas on this subject for the workshop. Also, I thank Miriam abou Zahab, who gave me valuable advice on this subject, some of which is included in the article. Finally, I appreciate the general support given me by workshop participants.

Correspondence concerning this article should be addressed to Iain R. Edgar, Department of Anthropology, University of Durham, 43, Old Elvet, Durham DH1 3HN, United Kingdom. E-mail: I.R.Edgar@durham.ac.uk
transported to the seat of the earlier revelations in Jerusalem and then taken through the seven Heavens, even to the Sublime Throne, . . . and initiated into the spiritual mysteries of the human soul, struggling in space and time. (p. 3)

Indeed, Gouda (1991, p. 2) described Muhammed as “one of the greatest visionaries of all time”: “He foresaw many an important event before it happened and interpreted innumerable dreams for his companions, his entourage, and other Muslims. He often asked his companions, ‘let us see, who had an interesting dream?’”

Bulkeley (1994, pp. 8–12) wrote of how the Koran speaks of Muhammed having been sent a dream before the battle of Badr, in which he “sees” the enemy forces as being smaller than they were “in reality,” thus encouraging him and his outnumbered soldiers (The Koran, 1956, pp. 43–46). Bulkeley also drew on Corbin (1966) to tell of Shaikh Ahmad Ahsa’I, “founder of a C19 Islamic reformist movement, who had a series of visionary dreams during his adolescence that revealed to him the essentials of Shi’ite theosophy” (Bulkeley, 1994, p. 10).

Today, in Islam, the dream can be seen as politically and personally significant, as being for some the “word of God” even. Yet the current role of the dream among militant Islamic fundamentalists, such as Al-Qaeda, has not apparently so far been studied. It has been reported (Judah, 2001, p. 13) that the Taliban leader, Mullah Omar, founded the Taliban movement in Afghanistan in 1994 following a dream in which “allegedly . . . God had commanded him to restore order.” Also, I have been told in private correspondence (from Mariam abou Zahab, a French political scientist who has spent many years studying in Pakistan and Afghanistan) that

Mollah Omar was allegedly called to action in a visionary dream of a kind similar to those by which Amir Abdul Rahman Khan claimed to have been inspired. Mollah Omar claims that he saw the Prophet who asked him to take action and save Afghanistan from corruption and foreign powers. This vision gave him a mystical dimension to set him apart from ordinary politicians and was an attempt to give a charismatic basis for his authority. In his autobiography, Abdul Rahman (who reigned over Afghanistan from 1880 to 1901) claims that the Prophet and the Four Companions had appeared to him in a revelation, choosing him as a future amir. (M. Zahab, personal communication, May 22, 2003)

So, Mullah Omar possibly claimed political and spiritual continuity as a contemporary savior of Afghanistan by asserting a continuity of anointing dream with Abdul Rahman. Such an assertion fits well into the Islamic theme of the “dream as political prophecy” (Quinn, 1996). There are also other stories of Mullah Omar’s prophetic dreams:

Mollah Omar’s dreams are interpreted by his disciples as signs of God’s will. For instance, in 1998 he had a dream that if the Taliban repaired the shrine of the Mujaddidi family in Jalalabad, they would take Mazar-e Sharif (which they had taken before and lost). They did take Mazar-e Sharif in ’98. This dream was used to legitimize an action which was considered as contrary to Islam by some of the Taliban and by the Arabs who accused the Taliban of being grave worshippers. (M. Zahab, personal communication, May 23, 2003)

Mullah Omar seems to be a prolific dreamer. Mullah Nida Mohammed, uncle to Mullah Omar’s wife, says, “Before he attacks some place he dreams, and then in the morning he orders a commander to attack that place” (Arabshahi, 1998). The Telegraph (U.K.) newspaper reported that during the Afghanistan war with the United States, “the peaceful handover of Kandahar was scuppered at the last minute after the one-eyed leader had a prophetic dream” (Spillius, 2001, p. 13).

Osama bin Laden, likewise, seems to relate to dreams. A U.K. newspaper, The Mirror, reported a transcript of a released video apparently showing Osama bin Laden referring to
a set of anticipatory dreams by some of his followers of the September 11th attack. These followers apparently did not know of the planned attacks, and Osama bin Laden spoke of his concern that “the secret (of the attacks) would be revealed if everyone starts seeing it in their dreams” (Lines, 2001, p. 5). Earlier in that video transcript (translation by the U.S. Government), recorded on the 9th November 2001, Osama bin Laden said,

[Abu-Al-Hassan Al-Masri] told me a year ago: “I saw in a dream, we were playing a soccer game against the Americans. When our team showed up in the field, they were all pilots!” He said: “So I wondered if that was a soccer game or a pilot game? Our players were pilots.” He [Abu-Al-Hassan Al-Masri] didn’t know anything about the operation until he heard it on the radio. He said the game went on and we defeated them. That was a good omen for us. (http://www.September 11.News.com/mysteries3)

More recently, the U.K. shoe bomber, Richard Reid, was reported as divining special meaning about his work and role as an Islamic militant fundamental from his dreams, which he refers to in one of his final three e-mails (Reid, 2003, p. 19).

Yosri Fouda, the Al-Jazeera journalist who in 2002 interviewed two of the core planners for the 9/11 attack, Ramzi Binalshibh and Khalid Shaikh Mohammed, who in that interview for the first time said that Al-Qaeda was responsible, has written about the role of dreaming among the “Brothers” (the 9/11 attackers):

Dreams and visions and their interpretations are also an integral part of these spiritual beliefs. They mean that the Mujahideen are close to the Prophet, for whatever the Prophet dreams will come true. In a videotape recorded shortly after 11 September, al-Qaeda spokesman Sulaiman Abu Ghaith is seen and heard speaking in the company of bin Laden, who was playing host to a visitor from Mecca: “I saw in my dreams that I was sitting in a room with the Sheikh [bin Laden], and all of a sudden there was breaking news on TV. It showed an Egyptian family going about its business and a rotating strap that said: ‘In revenge for the sons of Al-Aqsa [that is, the Palestinians]. Osama bin Laden executes strikes against the Americans.’ That was before the event.”

Bin Laden then interprets: “The Egyptian family symbolises Mohammed Atta, may Allah have mercy on his soul. He was in charge of the group.”

Ramzi Binalshibh would later tell Fouda long stories about the many dreams and visions of the ‘brothers’ in the run-up to 11 September. He would speak of the Prophet and his close companions as if he had actually met them. . . . Atta promised so to do, but also told Ramzi a little anecdote about “brother” Marwan (al-Shehdi) that he knew would please him. “Mohammed told me that Marwan had a beautiful dream that he was [physically] flying high in the sky surrounded by green birds not from our world, and that he was crashing into things, and that he felt so happy.”

“What things?” Fouda asked.

“Just things,” answered Ramzi.

Green birds are often given significance in these dreams. (Fouda, 2003, p. 109)

It is important to realize that there are likely to be significant differences in understanding and interpreting dreams between the Taliban and Al-Qaeda leaderships; Taliban leaders have usually come from rural, less educated, and materially poor backgrounds, whereas Al-Qaeda leaders, such as Osama bin Laden, have been re-Islamized following more Westernized and materially prosperous backgrounds. However, the above array of examples does open up a hitherto almost unknown and unstudied world within a world of Al-Qaeda and related organizations. Dreaming for these groups seems to be a possible source of prophetic revelation and spiritual and political insight. Reeve (2001) wrote that “even when Al-Qaeda was based in Sudan . . . [it] . . . had a cleric specialising in interpreting
dreams” (p. 1). For Westerners for whom mostly a dream is “just a dream,” these examples raise the question of how dreams can be so significant in a non-Western context.

“The veridical dream is one forty-sixth of prophecy,” stated an Islamic tradition attributed to the Prophet Muhammad” (Sviri, 1999, p. 252). Gouda (1991) tried to explain this saying:

According to the Hadeeth, dreams are one of the forty-six parts of prophecy. The reason for this particular figure might be that the duration of Muhammad’s prophecy from the time of the divine revelation, which began when he was forty and lasted till his death, was twenty-three years. But it was preceded by six months during which he saw nothing but dreams—dreams that came true “like the break of day,” to borrow the expression of his wife, A’isha. Hence the figure 1/46. (pp. 1–2)

Sviri (1999) went on to set out the consequences of this tradition for the role of dreaming in medieval Islam, “while prophecy has ceased, Muhammad being the seal of the Prophets, messages of divine origin can still be communicated through dreams, albeit on a smaller scale than prophecy” (p. 252). This meant that for the dreamer, and particularly for those followers of Islam with a mystical facility, the dream was a potential vehicle to the divine. In sleep or in deep contemplation, the mystically attuned could then have access to the noumenal, and not just the surreal.

ISLAMIC DREAM THEORY

Dream interpretation did not of course begin with Islam; Islamic dream theory grew out of the various Middle Eastern dreamwork traditions dating back to the Assyrian, Egyptian, Judaic, Roman, Christian, and Greek traditions. The exemplary record of this history, particularly ancient Greek and Roman dreamwork traditions, is contained in Artemidorus’s Oneirocritica, written in the second century of the Common Era. The Oneirocritica was translated into Arabic by Hunayn ibn Ishaq in the ninth century (Sviri, 1999, p. 253).

The Islamic view of the role and potential value of dreams is based on Islamic psychology (i.e., nafs). The Islamic philosopher, Ibn Ishaq al-Kindi (d. ca 866), in his “Epistle on the Nature of Sleep and Dream,” argued that while asleep the psyche is liberated from the senses and the sensible (al-hissiya) and has direct access to “the form-creating faculty” (al-qawwa al-musaawwira; quoted in Sviri, 1999, p. 253), which I understand as similar to the Sufi concept of the “imaginal” (Alam al-mithal). Really, as Taylor (1996, p. 142) wrote, there is a “startling agreement” among the “sacred/mythic narratives of the world” as to the direct access to the divine to be had through dreams. Part of the dream theory of Al-Ghazali (d. 1111), a famous Sufi writer on dreams, is summarized succinctly by Sviri (1999):

A veridical dream vision, which is by definition a weak version of prophecy may be granted to the pious and righteous during their lifetimes. Al-Ghazali explains that in a state of outer and inner purification the veil covering the heart is lifted and a vision of the future is revealed to the heart’s eye. The heart, he explains, is like a mirror upon which the forms (suwar) and meanings (ma’ani) are reflected. The source of these forms and meanings is the (preserved) tablet (al-lauh al mahfuz), the heavenly book that records all created and preordained phenomena from the beginning of creation to its end. In the process of dreaming, it is suggested, a double act of mirroring takes place: the tablet mirrors the incorporeal forms that exist in the unseen, and the unveiled heart, in contemplating the tablet, mirrors the images reflected there. When the heart is not obscured by the veils of desires and sense perception, visions from the world of the unseen may thus flash and become reflected upon its clear surface. This is best achieved in sleep, since in sleep the senses lie dormant and do not distract the heart. (p. 256)
To explain the ancient Islamic dream theory, Gouda (1991) quoted one of the earliest Arab writers on dreams, Al-Nabulsi:

The soul resides in a few drops of blood in the center of the heart; the heart is controlled by the brain; and the soul is attached to the \textit{nafs}. When a person falls asleep, his soul stretches like a night light or a sun ray to see through The Light or Illumination of God what the Archangel of Dreams reveals to him. It then withdraws to return to the \textit{nafs}, like the sun when it gets covered by cloud . . . when the dreamer regains his senses which become active, his soul remembers what was shown or portrayed to him in imaginary form by the Archangel of Dreams. (p. 4)

**ISLAMIC CLASSIFICATION OF DREAM IMAGERY**

However, an epistemological classification and understanding of a dream image involved in medieval Islam, for example, applied understanding of hierognosis (Corbin, 1966, p. 384). Hierognosis refers to the hierarchical classification of the different orders of visionary knowledge displayed both in dreams and in waking realities. Therefore, dreams would be interpreted by reference to the status of religious imagery appearing in any dream. The appearance and message from the dream of the Angel Gabriel would have a higher potential truth value than a message received from the dream image of a local Saint. Dream interpretation involved particularly the assessment of whether the dream image and its apparent meaning emanated from angels or demons (Meier, 1966, p. 422), demons being able, in dreams, to manifest themselves as angels. The oneirocritical assessment hinged on the context of the dream and particularly on whether the dream advocated moral or immoral choices, as angels would be unable to advocate “evil” as the concept of “evil” was understood in Islam. Overall, three kinds of dreams were set out first by the Prophet and later dream writers such as Ibn Sireen. First came spiritual dreams inspired by God; second, dreams inspired by the devil; and third, “dreams emanating from the \textit{nafs} or earthly spirit that dwells in the dreamer’s body (as this word in Arabic means ‘running, hot blood’) and is distinct from the soul, and what this \textit{nafs} or innermost heart . . . ardently desires” (Gouda, 1991, p. 3). This third kind of dream could be caused by what had been eaten and by what was desired by the dreamer, so producing “a medley of dreams, muddled, jumbled dreams, mere hallucinations, and nightmares” (Gouda, 1991, p. 4).

Classification of the dream within a religious perspective typically focuses, however, not on the discovery of some latent psychological or existential meaning, but rather on reaching a correct perception of the authority and purpose of the dream as meant by the spiritual authority who is believed to have evoked or brought the dream. In Islam the visionary dream has held an exalted status, although there are distinctions made between visions and nighttime dreams depending on the status of the dreamer as well as on the recorded account, such that the use of the word \textit{dream} can in fact on occasion refer to daytime vision.

The occasional lack of certainty as to whether a dream or a waking vision is being described is in part due to the Sufi tradition within Islam (Corbin, 1966, p. 406) in which the concept of the imaginal world is developed to define a discernible world between that of sensibility and intelligibility, called \textit{Alam al-mithal}. This imaginal world is defined as “a world of autonomous forms and images” (Corbin, 1966, p. 407) that is apprehended directly by the imaginative consciousness, through vision and dream particularly, and was held to validate suprasensible perception. This \textit{imaginal} world should not be confused with \textit{imaginary}, which refers to something unreal. Corbin further developed his idea of the imaginal, as
SUFISM AND DREAMING

As well as the Sufi concept of the imaginal, there is a long tradition in Sufism, the mystical way of Islam, of the inner guide, Friend of God, or Sheikh, who advises the seeker of his or her path of return to God. This guide can be found in the outer world and in the world of dreams. Sometimes the seekers will dream of their mystical Friend many years before actually meeting them and then may carry on receiving guidance dreams as well as real-world contact. In Twelver Shi’ism, the inner guide is often 1 of the 12 Imams, 11 of whom died and the 12th, who disappeared, is Muhammad Al-Madhi, the hidden Imam whose return “will announce the end of the cycle of our aion” (Corbin, 1966, p. 385). At the Sheffield Sufi Centre I visited a year ago, members spoke openly as to how they received spiritual guidance from their Sheikh Nazim of the Naqshbandi Sufi tradition. One person spoke of his apparent precognitive dream of his trip to Damascus and of how his Sheikh had advised him in a dream to pray daily. Another woman reported a precognitive dream wherein she had dreamt of her brother-in-law changing clothes, only to discover he had been mistakenly arrested at the airport. There can even be spiritual competition shown in dream reports. Another Sufi there, a member of a different Sufi order from that of Sheikh Nazim, spoke of a dream in which his own Sheikh had remonstrated him for getting advice on the wisdom of his second marriage from yet another Sheikh rather than from him—even though this Sheikh was dead. Apparently the dead Sheikh was not complaining but pointing out that formalities had not been observed, and therefore this dream message balanced out this lack of spiritual manners. This Sufi wrote about the background to his dream and the dream itself:

I joined a Sufi order—a branch of the Qadari Tariqat—just before my 19th birthday. Subsequently, the Shaykh of this order died and was not replaced. After this I wanted advice on my marriage to my present wife and went to another Shaykh from another order. This Shaykh told us to marry quickly and we did within the week. On my wedding night I had this dream: My Shaykh, who had died, appeared looking slightly annoyed, then the second Shaykh appeared. My Shaykh said “the advice that man gave you was correct but you should have come to me for the advice.” The backcloth of this dream was an airport, we were standing at a sort of crossroads of runways. I understood in the dream that both Shaykhs had flown in for the meeting. I also understood that the error I had made in not seeking my Shaykh’s advice/permission had been corrected. (personal communication, March 28, 2003)

Even anthropologists have not been immune from the apparent experience of a Sheikh’s dreaming. Ewing (1990) studied Sufi initiation dreams from a semiological perspective and later described and discussed the impact on her belief system of one dream experience and her recounting of her dream. She was studying Sufism in Pakistan, and in her article (Ewing, 1994) she seriously considered the possibility that a Sufi man, regarded by his followers as a saint, had “sent her a dream.” This experience led her to question the anthropological tradition of observational skepticism with regard to data collection in the field. On the basis of this experience, she began to value the possibility of belief in aspects of her informants’ worldview coexisting with rigorous anthropological enquiry.

A WAR OF DREAMS?

One sees in the quotation from Yosri Fouda that the dreamer (Sulaiman Abu Ghaith) who is with Osama bin Laden in the November 9th, 2001, video speaks of the 9/11 attack as
being revenge for the Zionist/American oppression of the Palestinian people. The history and fate of Palestine are integral to the most terrifying dramas of our times. In Appendix One of Fouda’s (2003) recent book, he quoted an Al-Qaeda statement justifying their Jihad against the West and Israel:

> Muslims believe in all the prophets . . . and if there is a promise in the Torah that Moses’ followers have the right to Palestine, then we think that the Muslims should have that right. Therefore, the historical claim for the right to Palestine cannot be overlooked by the Islamic nation. (pp. 189–195)

And yet, with a profound and unacknowledged irony, both Zionists and the “brothers” appear to claim divine authenticity and legitimation for their nationalistic, territorial, and spiritual ambitions from “unseen” and so unverifiable dreams. With regard to Israeli and Zionist claims to Palestine, for example, Jacob’s ladder dream at Bethel (Genesis 28) is the remembered occasion when Jacob is recorded as “seeing” angels ascending up a ladder and “heard” God give the land on which he lay to him and his descendants, promising this territory in perpetuity. Today, the F16 fighters flying over Gaza gain their political mandate, implicitly and in part, from the memory and subsequent political use of this recorded and remembered dream imagery. The Zionist argument for the territorial statehood of Israel is at the end of the day, in part, based on a recorded dream recounted over 2,000 years ago.

Faisal Bodi, a Palestinian journalist, writing in the U.K. Guardian newspaper, referred to Golda Meir, the former Israeli Prime Minister, who famously stated that, “This country exists as the accomplishment of a promise made by God himself. It would be absurd to call its legitimacy into account” (see Bodi, 2001, p. 18). Bodi continued, “That Biblical promise is Israel’s only claim to legitimacy” (p. 18). Part of that promise is found in the above dream report of Jacob. As Knafo and Glick (2000) wrote, “The Patriarch’s dreams (in Genesis) are the foundation dreams of Judaism” (p. 28), and further, that those Genesis dreams “play a major part in highlighting the concepts of the Chosen Nation, the coming back from exile, the Promised Land” (p. 25). I have written elsewhere in detail (Edgar, 2002) as to how dreams are uniquely attractive in making a “charter myth” (Malinowski, 1954) for statehood.

**CONCLUSION: DREAM’S END**

Some Al-Qaeda leaders are reported to have said in the media that they significantly relate to their own and others’ dreams. It may be the case that some militant members, such as Richard Reid (see earlier), the shoe bomber, are motivated or perhaps reassured by their dreams as to their path in life. Why are dreams so powerfully experienced by some people at points in their life? Maybe because a dream cannot be precisely verified, tested, observed, or even its actual narrative contested, it just is as reported, and so it partakes of the numinous quality of the other world. Knudson (2001) has suggested that the intrinsic beauty of dream imagery in highly significant (Genesis) dreams may account for their long-term impact on the dreamer, whereas Knafo and Glick (2000), grappling with the same issue of the numinous power of some (Genesis) dreams, suggested dreams “are on the edge between reality and fantasy, and future and past” (p. 26). Burridge (1969) confirmed the view of the special nature and power of dreams and visions in his study of charisma:

---

1The Hebrew Bible records that prior to Jacob’s ladder dream, God had “spoken” to Abraham, possibly in a dream with a similar message (Genesis 15).
At the start the personal qualities of the prophet seem to matter little. What is important is that his message should appear to come from a source beyond commonsense experience. It must be a revelation. Usually the message is claimed, or presumed, to have been revealed in a dream or a vision or some other mystical experience. Whatever the cultural idiom, the message is taken to be beyond man’s wit to devise. It is a divine revelation. It transcends the capacities of a man acting alone. (p. 111)

The dream has then the appeal to the young Islamic militant recruit, perhaps disillusioned with Western ways and the West’s apparent indifference to spiritual matters, including dreaming, of offering possible certainty, like seeing the “writing on the wall” as saying “this is your path: take it.”

This hypothesis makes an argument for the urgent study of political/religious conversion and guidance dreams, in this case of Islamic militants, but it also includes other kinds of political conversion dreams. The context of the dream conversion, the events leading to it, and its consequences on the identity and actions of the converted would all need to be illuminated as well as the culturally specific dream theory through which they came to understand their experience. This study would not be to supplant ethnic dreaming with the “American Dream,” however, but it would be basic research aiming to develop understanding of human identity change, motivation, and behavior.

That such dreams only happen to others, I can, reflexively, offer an earlier dream experience of my own that has some conversion aspects to it, though in my case there was no conversion. I was 19 and at York University (U.K.), studying philosophy. I was flirting with joining a far-left political group, and in my dream, which was the first dream I can recall in my life, I was being interviewed for membership of this group. I remember agreeing to all the questions of the type, “would you do this . . .” until the final one in which I was asked “would I murder my wife for the revolution?” to which I said “no.” That was the end of the interview and the dream, and thereafter I seemed to lose all interest in joining the group and indeed in explicit political membership of radical groups. If I could not murder my wife, obviously I was not qualified to be a revolutionary.

As access to Guantanamo Bay and the remaining Al-Qaeda militants is practically impossible, or even completely impossible, further direct verification of this thesis is fraught with verification issues. What I can say is that there is a very strong divinatory or mantic dreaming tradition throughout Islam, particularly in Sufism. However, Al-Qaeda generally does not appear to recruit from the Sufis (though recently one of the British suicide bombers in Israel was reported as being apparently influenced, surprisingly, by Sufism). It is probable that such militant dreamers understand their dreams within Islamic dream theory, psychology, and the litany of symbolic meanings for dreams outlined by Gouda (1991) and drawing on the preeminent dream theorists of Islam. These dream theories will have drawn on more ancient Hellenistic and Middle Eastern dream interpretation traditions. Does Osama bin Laden reach for a dream or a Kalashnikov when needing help? More likely it is for the Koran and the partly dreamt vision of the Prophet Muhammad.

REFERENCES


