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A cognitive analysis of the invented religions: the Flying Spaghetti Monster case

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Abstract: In this paper, I am going to realize an analysis of the Flying Spaghetti Monster religion from a cognitive perspective. This invented religion, which began as a protest action in Kansas in 2005, has gained numerous followers worldwide. The first part of the article illustrates an analysis of the study discipline entitled the cognitive science of religion. In the second part, my study takes into account Justin Barrett's taxonomy of religions, which depicts five necessary characteristics that a god needs to possess to become memorable: must be minimally counterintuitive (1), and an intentional agent (2); also must possess strategic information (3), act in detectable manners (4) and motivate practices that reinforce belief (5). In the third part, I prove that the deity of FSM religion possess these five attributes. Thus, my thesis is that this parodic religion has, from the point of view of the cognitive science of religion, a similar formal structure as the great historical religions of humanity. For the academic study of religion, this topic raises several interrogations regarding the general functions of these symbolic systems. Consequently, this paper establishes that the way we understand our society is related to the answers that we offer to these concerns.

Key Words: cognitive science of religion, invented religions, Flying Spaghetti Monster, pastafarianism, pirates, faith, successful gods, Justin Barrett, Bobby Henderson

1. General aspects of the article

The religion of the Flying Spaghetti Monster is a cultural phenomenon that was spread throughout the world. To understand the influence of this movement it is necessary to make some preliminary clarifications. First of all, it has to be mentioned that „the origin of the Church of the Flying Spaghetti Monster (FSM) begins with a letter sent to the Kansas State Board of Education in 2005 by its founder, Bobby Henderson, in reaction to their consideration of including Intelligent Design (ID) in its public school curriculum" (Quillen 2017, 207-8). Being unsuccessful in this action, Henderson forms his religion. Its god is called the Flying Spaghetti Monster, and the doctrine formed around him is a satirical one.

Also the FSM is considered an invented religion. In general, as some studies illustrate, "the notion of «invented religions» is deeply provocative, in that it contradicts the traditional understanding of religion as a phenomenon that traces its origins to divine revelation (...), or with origins so far in the past that individual founders are unknown but venerability is assured (...), and asserts that teachings that are not only new but are admitted to be the product of the human imagination deserve that most lofty of designations, «religion»" (Cusack 2010, 1).

Thus, the classical meanings that we offer to religious systems are challenged and modified. Consequently, I will make a presentation of this discipline in the first part of the article. In this context, the cognitive science of religion tries to determine those characteristics that a specific deity must have to spread successfully. Justin Barrett's studies have succeeded in establishing these criteria and are central to the cognitive analysis of religion. I will present these ideas in the second part of this study.

In the last part of this paper, I will apply these criteria to the Flying Spaghetti Monster religion. There I will show that, „while the CFSM started as a solely virtual phenomenon (...), it rapidly expanded to the physical level, in a number of contexts. Firstly, its forms and expressions (objects and symbols) materialized in daily life; and then, allegiances started to be manifested in the social space" (Obadia 2015, 120). Through these actions, the followers of this religion obtain several socio-cultural benefits. In conclusion, I will point out some aspects that can become problematic following this perspective. Nowadays it is obvious "that invented religions look like religions, function like religion, have doctrinal and ritual content that appear religious, and therefore ought to be considered legitimately religious" (Cusack 2010, 148). I believe that such a position should determine us reconsider the classical meanings that the academic study of religion offers in a world that is now more diverse.

2. An introduction to the cognitive science of religion

Religious representations are one of the most significative parts of cultural history in the world. Over the years in human societies, the number and also the variety of religious systems are notable. Despite this complexity, as many scholars demonstrate (e.g. Barrett 2000, Boyer 2001, Atran 2002), these forms are not pointless because, through them, it's possible to reflect an epistemological structure in societies. In this context, we can discuss two significant dimensions. First, the religious structure involves a theoretical level in which are included the forms that we can call, without having an axiological intention, dogmatic. Here we have all the texts and objects that are involved in the composition of an ideological dimension of a religious system: books, icons, statues and other elements of worship. Secondly, beyond these things is a dimension that can be called non-theoretical. It is evident that also, „religion involves feeling, thinking, acting, and relating" (Hinde 1999, 11), structures that define certain specific forms of behavior. Most of the recent approaches try to explain religious manifestations. But as a consequence of the above, "«to explain» may be taken in two senses" (Sperber 1996, 41). Here, the first sense is related to the dimension called dogmatic, and means to make different religious objects intelligible (e.g. giving religious texts a meaning or exposing the function of a cult object in a ritual). Secondly, at the meta-theoretically level, to explain doesn't mean only to justify some forms of religious behavior, but also to show how it is possible to reach these representations. According to Sperber, „in the second sense, to explain a cultural representation is to show how it results from relatively general mechanisms at work in a given specific situation" (Sperber 1996, 41). As we know, for a long time, the interpretation of sacred elements was a task only of theologians and historians of religions. Despite this, "nowadays religion has moved closer to the centre of academic interests and we find that sociologists, political scientist, economists, historians, psychologists and cognitive scientist have unexpectedly discovered religion as an important area of research" (Seiwert 2012, 30). Therefore, recent approaches are trying to develop new models for analyzing the sphere of religiosity in the world. From this moment, the accent is not only on the interpretation of the sacred texts and education through the values found in these works. Within the new approaches, the main issues are trying to illustrate the patterns that facilitate the preservation and transmission of religious forms over time, in different cultures and spaces. Situating us in a period of post-metaphysics, in which meta-narrations no longer hold gnoseological functions (Lyotard 1979), we turn to approaches that perceive religion as a standard function of the mind. The truth of these

religious ideas is no longer a matter of interest in these research fields, and the problem of faith is abandoned because we can acquire numerous ideas without even believing them. As Campbell notes, since post-metaphysical scholars "no longer believe in what they suppose to be the literal referents of religious words, they lose sight of the possibility of great truths" (1991, 93). Consequently, these new research fields try to explain how these ideas are created in the human mind and transmitted over the generations. One of these areas of research, the one I will refer to, is the cognitive science of religion. In short, "the cognitive science of religion is a growing field, one that combines work from evolutionary psychology, economics, ethnography, and the history of religion" (Buskell 2018, 3) in an attempt to make a new approach to religious realities. One of the most important perspectives in cognitive science of religion is the attempt "to adopt a nonontological approach – that is, to study religious experiences and beliefs as empirical phenomena regardless of whether they are true or valid" (Argyle 1997, 1). It is obvious that for cognitive researchers, religion is, as mentioned above, influenced by some mental structures. This implies that, if we want to understand how religious representation appears and develops, we must examine the essential structures of the human mind. In other words, the fundamental premise of cognitive researchers is that "there is no religious instinct, no specific inclination in the mind, no particular disposition for these concepts, no special religion center in the brain, and religious persons are not different from the nonreligious ones in essential cognitive functions" (Boyer 2001, 329-330). In this context, the socio-cultural dimension plays a significant role. The acquisition of many myths, values, and norms that the religious systems codify, takes place within the socialization processes. Also, it is important to notice that for many scholars, "the religious system, like social knowledge and the scripts relating to behaviour in social situations, becomes part of the self-system of each individual. Acquisition depends in part on pre-existing proprieties of the human mind, but it is facilitated by social factors in a number of ways" (Hinde 1999, 201). Thus, cognitive researchers admit that the acquisition of religious representations occurs at certain stages when several sociocultural elements interfere with some of the basic mental structures.

3. The characteristics of a successful god

The cognitive science of religion has become an important domain of research, cognitive scholars offering, among the years, distinctive perspectives regarding belief. One of the main approaches in this field, attempts to describe the characteristics that make "some representations more stable and successful, both across and within cultures" (De Cruz 2014, 489). Thus, the cognitive scholars are trying to identify those aspects

that make some religious concepts successful "in the sense of inhabiting human minds and being shared in largely similar forms" (Barret 2008, 149) over time. The study of the basic structures of the human mind shows that some thinking patterns can decisively determine our beliefs, and also that "some representations interact with our cognitive abilities and dispositions in ways that make them more resistant to decomposition through transmission than others" (Day 2007, 62). Regarding these ideas, an article published by Justin Barrett entitled *Why Santa Claus is not a god* explains the most important aspects of a successful god concept. This paper is considered in CSR the best attempt to provide a classification for this topic, these characteristics offered by the mentioned author, becoming fundamental in this area of research.

The first feature described by Barrett is the idea that certain concepts are counterintuitive. According to Swan and Halberstadt, "the domain of counterintuitive agents includes all manner of gods, goddesses, superheroes, and cartoon characters with abilities and features that violate our intuitive or «folk» expectations about the world" (Swan, Halberstadt 2019, 1). Boyer shows that religious representations involve five ontological categories: persons, animals, plants, artifacts, and non-living (natural) things. Also, intuitive-knowledge domain violations can be at the psychological level, at the biological level, and at the physical level (Boyer 2001; Boyer 2000). Significant in this case is the number of the counterintuitive elements that an ontological category can break. As Barrett argues, "theoretically a concept could have a huge number of properties that violate intuitive expectations. In practice, a large number of counterintuitive properties undermines conceptual structure to the point that it lacks coherence and might no longer qualify as a concept" (Barrett 2008, 151). So, as the number of these intuitive changes increases, the chances of having a concept that expands successfully is lower.

Therefore, as cognitive scholars claim, to be successful, a god concept must be minimally counterintuitive (MCI). In other words, "the religious concept preserves all the relevant default inferences except the ones that are explicitly barred by the counterintuitive element" (Boyer 2001, 73). This means that a concept that has only one or two counterintuitive aspects becomes more attention-grabbing rather than an intuitive concept or a notion with too many violations. Several studies realized by cognitive researchers show that "counterintuitive concepts were better recalled than bizarre concepts" (Upal et al. 2007, 416). This aspect shows that, through these qualities, religious ideas interfere, in a remarkable way, with the structures of the human mind. And, "the presence of a few counterintuitive concepts in a narrative, even within a list of otherwise ordinary concepts, improves memory for the entire narrative or list" (Henrich 2009, 246). Consequently, minimally counterintuitive concepts are validated by empirical studies as being fundamental to a successful god notion. That's why Barrett begins his classification with this approach.

The second point presented by Barrett is that of the notion of gods as intentional agents. For a concept to become attention-grabbing, it is not always significant to be only minimally counterintuitive. Consequently, for the successful god concepts, "the counterintuitive property or properties that they possess enables them to explain or predict a broad range of events and be incorporated into reasoning about many different domains relevant to human concerns" (Barrett 2008, 152). If we refer, for example, to an invisible potato (folk physics violation), the chances of this concept attracting attention are rather small, even if it is minimally counterintuitive. In opposition, if this potato would see the future and predict forthcoming events (folk psychology violation) its impact would increase. And that's because, as many studies show, "counterintuitive abilities that violate folk psychology were more salient for participant-invented religious agents than for nonreligious agents" (Swan, Halberstadt 2019, 9). In Barrett's view, an intentional agent is a specific concept that "deliberately and purposefully initiates action" (Barrett 2008, 152). And, this function is best accomplished, as I presented, by folk psychology violation.

The next criterion that a concept must meet in order to be a successful god is to possess strategic information. Returning to the example of the invisible potato, it is clear that it could only have a minimal impact on people's lives. When a concept like this becomes an agent who holds information about actions that might happen or about several people, it becomes more remarkable. As Barret argues, "if a god does not know that you exist or what you do or say, they cannot serve in a devotional cult, cannot be appealed to for favor or information, and cannot enforce moral codes" (Barrett 2008, 153). These concepts obtain the strategic information from the counterintuitive properties that they possess. Expressed in other words, if the relationship between how that god acts and what people should do is clear, the chances of being memorized and transmitted are higher.

A fourth criterion that a god concept should possess to be remarkable is to have a detectable action. This idea means that to be a successful god concept, MCI agents must act in manners that can be perceived by humans. In Barrett's words, "to be a strong candidate for a god, a minimally counterintuitive agent with strategic information needs to potentially act in our world, preferably in some way that is detectable" (Barrett 2008, 153). However, meeting this criterion is not sufficient. As a number of studies show, if these forms of acting also provide a variety of emotions (e.g. fear, hope, trust, and so on), then their impact is higher (Swan, Halberstadt 2019; Gervais, Henrich 2010; Barrett 2008). Therefore, the actions that can be observed by humans are fundamental to the existence and proliferation of a god.

The last feature that Barrett presents is to motivate reinforcing practices. As he asserts, if a concept meets the first four criteria, then this

characteristic is inevitable. These kinds of notions are, as we have seen, "agents that are minimally counterintuitive with strategic information, and can act in the human world in detectable ways, typically motivating behavior that reinforces belief in the being" (Barrett 2008, 154). These practices have different forms within the cultures of the world. The most widespread of them are rites, rituals, prayers, sacrifices, and so on. For many cognitive scholars, these forms of manifestation are crucial. For example, Boyer thinks that, "we generally call supernatural concepts religious when rituals are performed, when strong emotional states are associated with them, when they shape our interaction with other people, when they give us moral feelings, and organize social groups" (Boyer 2001, 90). If all these elements of worship are present, then the impact of a god is more noticeable.

4. The Church of the Flying Spaghetti Monster: a cognitive analysis

In this part of the article, I am going to analyze the Flying Spaghetti Monster religion following the criteria illustrated by Justin Barrett. According to the cognitive science of religion, satisfying all the features mentioned above is a necessary condition for a god to become powerful. Therefore, I will examine these five theses, to show the specific character of this religion. Even if this intellectual movement has a satirical purpose, its impact is significant. We can notice that "the adherents, who call themselves Pastafarians, purportedly number in the tens of thousands and are primarily located in North America, Western Europe, Australia, and New Zealand" (Bauer 2018). Consequently, the examination of the characteristics that make such an impact possible is undeniable.

The first aspect of a god that can expand successfully is counterintuitiveness. As the cognitive science of religion shows, god concepts reflect distinct features, facilitating their spread within different cultures. I pointed out that, according to Boyer, we are talking about violations on a physical, psychological and biological level (Boyer 2000). I also mentioned that only a few violations are possible, the minimally counterintuitive concepts (MCI) being the most memorable for the human mind. In our case, "the Flying Spaghetti Monster (FSM), which is said to be invisible, is depicted as a floating mass of spaghetti noodles with a large meatball on either side of its body and two centrally located eyestalks" (Bauer 2018). Beyond this strange combination that illustrates the physical form, the Flying Spaghetti Monster fulfills some aspects that prove its counterintuitivity. We refer to the fact that, as Bauer suggests, it is invisible, and thus, it can be present anywhere in the world.

Also, as Bobby Henderson shows in the *Second Announcement Regarding Canonical Belief*, "his Holiness the Flying Spaghetti Monster is

Eternal, without beginning and without end (...)" (Henderson 2010, 2). This aspect illustrates that the FSM is immortal, and its existence is not limited in space and time, as it is with ordinary beings. The Flying Spaghetti Monster and the religion formed around his figure do not respect the general aspects of existence. Therefore, these features are relevant to classical approaches in the cognitive science of religion, because their fulfillment proves that, in this case, we are talking about counterintuitiveness. Consequently, we can recognize that Barrett's first criterion is satisfied.

Second, to become a god who spreads successfully, a concept needs to be an intentional agent. It must have an impact on people's lives, especially in the fundamental aspects of existence. As the Church of the Flying Spaghetti Monster teaches, their god is the demiurge of this world, and "in the beginning created a mountain, trees and a midget" (Cusack 2010, 133). Thus, as I will show below, the FSM acts directly in the world through a series of specific practices, and it initiates actions that can directly affect people, both positively and negatively. According to the Gospel of the Flying Spaghetti Monster, "the truth is that FSM is hidden all around us" (Henderson 2006, 36), we will never know where this god is, but we recognize that he has power over our world. At the same time, "the FSM is invisible and passes through normal matter with ease" (Henderson 2006, 36). This regard reflects the fact that we can recognize a sequence of folk psychology violations. All these aspects prove that the Flying Spaghetti Monster is an intentional agent. Satisfying the fundamental characteristics that Barrett presents in this category, this religion shows, once again, the importance it has gained in contemporary culture.

The third aspect of Barrett's presentation is that a deity must have strategic information. This idea proves that there is always a way for god to know what people are doing and saying. There is also such knowledge at the level of actions that will take place in a specific situation. In other words, this trait is necessary to form a system of values that shows what is good or bad about a behavior. In the religion of the Flying Spaghetti Monster, these aspects also have a specific form. The defining argument which illustrates this aspect requires the presence of heaven and hell. As we find in the canonical texts of this religion, there is a distinct scheme, as well in this case.

Thus, it is true that "Pastafarians also believe in a Heaven, and now you see that we have a similar view that we can build upon. While it's true that the FSM Heaven is thought to be quite different" (Henderson 2006, 97) compared to that of Christianity, for example. Heaven in the Church of the FSM is a place of joy, its form, including many particular aspects: "The Pastafarian heaven is located on an island, with lots of ships sailing around. The great beer volcano dominates the island", (Maćkowiak 2016, 94) but there are also places to eat delicious pasta and party. The structure of hell also reflects a unique configuration in the case of this church.

Although we don't know how it looks, according to Henderson, "we imagine it's similar to FSM Heaven" (Henderson 2006, 65). This viewpoint means that "there is no hell with boiling liquids, fire, and physical tortures" (Maćkowiak 2016, 94) the only notable difference being that "unbelievers are deprived of quality goods and the variety of options" (Maćkowiak 2016, 96): low-quality food and drink, less distraction.

The aspects illustrated above are notable because we have a special connection between believers and the FSM. This deity has a bond with each member of this cult through prayers, "but that is not to say they will necessarily be answered" (Henderson 2006, 64). In addition to the prayers, we need some practices that may lead us to obtain these demands. I will come back to this idea when I analyze Barrett's fifth category. For the moment, it is enough to emphasize the idea that, through such a relationship, the Flying Spaghetti Monster has strategic information. This god knows the intentions and actions of each member of the cult. Thus, through this property, he can decide who deserves to go to heaven and who to hell. This feature is essential to the accomplishment of this third characteristic offered by Barrett.

I am going to continue with the analysis of an element that is defining for any religion. As the cognitive science of religion demonstrates, the impact of those gods acting in the world is higher for the human mind. Therefore, the fourth characteristic shows that the gods must reveal themselves through some detectable forms in the world. In the case of the Church of the Flying Spaghetti Monster, this aspect is also present. As I will show below, there are some specific actions by which this deity becomes recognized. Returning to the FSM Gospel, I will present a group of examples to illustrate these aspects.

First of all, it must be said that "the world was created to appear older than it is and that whenever a scientist performs a measurement, such as carbon dating, to show the age of an artifact, the FSM changes the results with His Noodly Appendage" (Bauer 2018). An unknown reason leads to this fact, but the Flying Spaghetti Monster has been doing so since the beginning of the world, five thousand years ago. Since then, „photons were placed individually, en route to earth, ostensibly emitted millions of years ago from stars across the galaxy. In reality, we know that each photon was divinely placed and red-shifted appropriately to make the universe appear to be billions of years old. We are still finding His camouflage methods at work today; each time scientists discover apparent evidence of a billions-of-years-old universe, we can be assured that this is just more elaborate preparation He put in place" (Henderson 2006, 51).

Second of all, another way in which the Flying Spaghetti Monster intervenes in the world is in the case of gravity. As the Gospel of the Flying Spaghetti Monster shows, there is also a specific reason that may explain this element: „what if it is He, pushing us down with His Noodly Appendages, that causes this force? He is invisible, remember, and is

undetectable by current instruments, so in theory it is possible. (...) We can only guess as to His motives, but it's logical to assume that if He is going to such trouble, there is a good reason. It could be that He doesn't want us floating off earth into space, or maybe just that He enjoys touching us – we may never " (Henderson 2006, 4).

I quoted these sections of text because they illustrate the argumentative model used by the followers of this cult. As we can see, these paragraphs show that the FSM has numerous identifiable ways of acting. Therefore, even if He remains invisible, its presence can be noticed by humans. As the cognitive science of religion proves, this fact makes its impact stronger. In connection with other aspects presented above, this function contributes to the development of the FSM Church. Thus, the fourth part of Barrett's scheme is also present, for the reasons shown in this sequence.

Consequently, we now come to the last section that we must explore in this part of the paper. As studies in this field have shown, this regard is also present if the first four criteria are identifiable. Especially within a religion of this kind, the illustration of those aspects that reinforce belief becomes significant. Therefore, I will turn my analysis to the fundamental aspects of the worship distinguished in the FSM Church. As I am going to describe, the impact of all these actions is significant among several cultural areas in the world. This cult has gained more and more members, and their socio-cultural rights are now numerous.

One of the important elements proves that "the pirate is a recurring figure in the Church's iconography and symbolic repertoire. For this reason, admirers of the CFSM are known to dress as pirates" (Obadia 2015, 122). Such an outfit is essential to receive an answer to our prayers from this deity. *The Gospel of the Flying Spaghetti Monster* emphasizes that "to increase your odds, it's recommended that you wear Pirate regalia or at least an eye patch" (Henderson 2006, 64). In this regard, we must also say that Friday is considered a sacred day, and a series of ritual activities are organized. As is known in this cult, „pastafarians are supposed to observe something that resembles liturgy: their rituals are made of prayers and supplications closely imitating Christian ritual ways. The pastafarian creed stipulates commandments to worship the monster and to spread its message, and declarations of faith ("May His noodly appendages touch you"). An expressive "Ramen!" - a combination term between the Judeo-Christian "Amen" and the eponymous Japanese noodle soup – concludes prayers" (Obadia 2015, 122).

All of these features lead to a recognition of the FSM religion in diverse spaces. And also, over time, we can distinguish an important process of extending these practices. For example, "The Church of the Flying Spaghetti Monster was accepted as a religion in the Netherlands in 2016, and that same year the first legally recognized Pastafarian marriage was celebrated in New Zealand" (Bauer 2018). In addition to these events,

we note the existence of actions that have a strong social impact. I will present an extended paragraph to highlight these cases. Thus, as Obadia describes, „in 2011, Austrian citizen Niko Alm requested and received the right to sport a colander on his head on the passport picture he used on his driver's license. This "hat" is one of the pastafarians' signs of allegiance, along with the pirate costume. (...) Another case was recorded in August 2013, when young Czech citizen Lukas Novy received international media coverage when he tried to renew his lost ID card. Like Alm, he presented a passport picture taken with a colander on his head. (...) In Poland, a country deeply attached to its Catholic heritage, similar cases have recently been recorded and the possibility to include the CFSM on the list of official "religions" is harshly discussed by the national administrations" (Obadia 2015, 125).

Through these ideas, we notice that the last criterion offered by Barrett is also met. As I have shown in this section, the number of ritualic elements is higher in this religion. Their practice is necessary, and this aspect proves that the elements that reinforce and motivate a specific form of belief in the FSM are present.

5. Conclusions

The proposed analysis is now complete, and, as I have shown, all the five criteria are successfully satisfied by the Flying Spaghetti Monster religion. From the perspective of the cognitive science of religion, we are talking in this case about a deity that can develop itself successfully. Even if this fact is obvious from an epistemic perspective, some dilemmas can still occur. This religion is invented for a satirical purpose and with peaceful intentions by an intellectual elite. As some studies illustrate, "those who were attracted to new religions were found to be generally among the better-educated and affluent sectors of society, with a high degree of agency and a consciousness of their right to choose the religious path that was most fulfilling to them" (Cusack 2010, 16-17). That is a positive fact because the liberty of opinion and expression is essential among the numerous religious forms of the contemporary world.

However, if we know what kind of criteria an ideas system must develop to reach an influence on the human mind and to expand successfully, then these aspects can become unpredictable. We could talk about manipulation, about inoculating certain erroneous beliefs, or even about the intentional presentation of false elements as true ones. Such elements can lead to religious fundamentalism, a problem that is still present in today's world. These aspects are mentioned by Henderson, who illustrates that "there is no wrong way to do religion, aside from intolerant and coercive practices. (...) And not just that we are adding more culture, a new phenomenon, or a new religion. It appears to me that

we are, in fact, creating a new way to do religion" (Henderson 2006, 200). This model is one that accepts diversity and freedom in all categories of society.

In this context, the subject of invented religions is of significant importance. As I have explained in the pages of this article, studies in the cognitive science of religion reveal how the human mind develops particular forms of belief. They always produce specific behaviors and lead people to distinct actions that a particular society follows. In the case of the religion of the Flying Spaghetti Monster, this point is also present. Starting from a critique of unsatisfactory practices in education, developing as a parody, this religion has an influential cult. Therefore, this case tells us some aspects that we should always keep in mind: first of all, it is essential to believe in different deities, and, secondly, this action must be peaceful and open to other religions and cultures.

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