

## The Ritual Vortex – Why Ritual Action Attracts Religious Ideas

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To many people ritual action appears peculiar. Although it is hard to pinpoint the exact nature of this peculiarity, it is rarely a problem to distinguish ritual action from other types of action in real life. The scholarly study of ritual reveals a variety of methods and interests (Kreinath, Snoek & Stausberg 2006). It is however possible to distinguish two major groups of ritual theorists that have different views on the peculiarities of ritual: The first group consists of authors that focus on the form of ritual action, the motor action of ritual. There is something fundamentally peculiar about the movements performed. It has been noted that in ritual, repetition (Boyer & Lienard 2006) and sequencing (Staal 1979) of the action is emphasized, but also the mere fact of doing something together in coordination has been a focus (Durkheim 2001, Sosis & Ruffle 2003). The meaning, if any, attributed the ritual is accidental. This does not explain the peculiarities of ritual. This conclusion has been reached because the meaning communicated by ritualists to anthropologists in the field is often idiosyncratic (Humphrey and Laidlaw 1992), defined by doctrine or merely deferred to the ancestors (Bloch 2005). The focus of attention is here solely the form and structure of the ritual. One of the first and most well known exponents of this group is Frits Staal (1979), who shocked many by claiming that ritual action was meaningless. But also Caroline Humphrey and James Laidlaw (1994), and more recently Pascal Boyer and Pierre Lienard (2006) have expressed similar opinions about ritual action although they reach different conclusions. I will call these theories “action theories”, because of their focus on the raw action.

The other major group of ritual theories goes the exact opposite way and looks to the “meaning” of ritual contents, such as what gods spirits and ancestors are involved, why the ritual is performed and what effect it is supposed to have. The actual movement is accidental and without relevance to understanding ritual. There is nothing particular about the movement at the most it may appear peculiar solely to focus attention on the meaning attributed the ritual. Well known proponents of this view of ritual are Victor Turner (e.g.1975), Clifford Geertz (1973) and E. Thomas Lawson & Robert N. McCauley (1990).<sup>1</sup> I will call these “meaning theories”, since the focus is the meaning of the ritual, regardless of what ever actual action the ritual may consist in.<sup>2</sup>

As can be gleaned from this superficial characterization, the action theories do not attribute any importance to the meaning of the ritual, while the converse is true of meaning theories, which do not- attribute any importance to the motor action.

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<sup>1</sup> While their theory has been dubbed the ritual form hypothesis, it still has to do with the form of the ritual exegesis attached to the raw action. Not the form of the raw action itself.

<sup>2</sup> I am acutely aware that these two groups are not at all comprehensive. Neither do most ritual theories neatly fall in to one or the other. It is merely meant as a useful organization of two important ways of analyzing ritual.

I believe that both groups have important insights to offer. In this article I wish to explore the chasm between these two views of ritual theories. I want to demonstrate why meaning, more precisely religious ideas, are often attached to the special kind of action that ritual is. In order to do this we have to examine what is distinctive about religious ideas and rituals, when compared to others.

## Ideas

In the cognitive science of religion it is common to distinguish between intuitive and counterintuitive ideas. Intuitive ideas are all the everyday regularities that we expect, such as gravity pulling things downwards, solid objects stopping the movement of other solid objects, plants needing nourishment, and animals producing offspring of the same species (Atran 1990, Keil 1989). Counterintuitive ideas on the other hand transgress these expectations in one way or another: flying carpets, invisible persons, and talking trees ( Boyer 1994). A growing body of research has investigated how these ideas are represented, remembered and transmitted (Barrett & Nyhoff 2001; Boyer & Ramble 2003; Gonze et al 2003; Norenzayan et al 2006; Atran & Norenzayan 2004), for our purposes it will suffice to observe that counterintuitive ideas is a special class of ideas different from intuitive ideas.

While it is a hallmark of religious ideas that they are counterintuitive (Pyysiainen, Lindeman & Honkela 2003), the reverse cannot be said to be the case. Few would call counterintuitive ideas like Santa Claus, Aladin or the Little Mermaid religious ideas. From a cognitive viewpoint the Bible cannot be distinguished from the collected fairy tales of Hans Christian Andersen or quantum mechanics. Still most people believe that there is a difference between fiction and religion. This has been termed the “Mickey Mouse problem” by some in the cognitive science of religion, because Mickey Mouse is a talking mouse and hence a counterintuitive idea, but not a religious agent (Atran 2002). It would lead too far to try to solve the problem of what distinguishes religious counterintuitive ideas from non-religious, but for the present purposes I will consider counterintuitive ideas religious when they are causally related to a person’s life. That is, when the ideas by implication or explicit reasoning are used to understand or predict events or actions in one’s life. In this way we will be able to distinguish Mickey Mouse and Jesus to a Christian. Because Jesus is thought to affect the life the Christian lives (such as answering prayers and forgiving sins), it is a religious concept. Contrary to this Mickey Mouse is merely entertainment and is not thought to intervene in anybody's life.

Figure 1 shows the conceptual relation between the different classes of ideas.

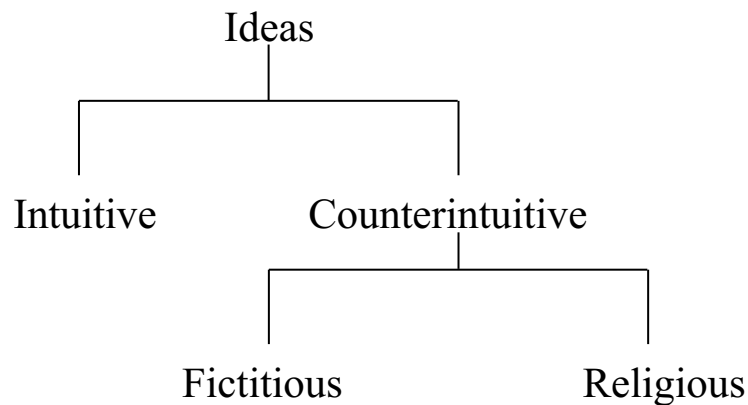


Figure 1 classification of ideas

## Action

Likewise we need to clarify the terminology of action from the most generic concept to the particular distinction we need to make: Everything that “happens” in the world can be termed an occurrence. From the northern lights to a little girl threading a needle, anything that is changing over time is considered an occurrence to the human cognitive system. Occurrences can be divided into two groups: events and actions. What distinguishes actions from events, is the involvement of an agent (Zacks et al. 2001). Events can happen without the initiation of an agent, whereas actions are caused by an agent. Humans parse actions in fine units and coarse units, which are made up of fine units. Thus “Event segmentation exhibit a hierarchical structure, with segments at a coarse temporal grain corresponding to groups of fine-grain segments”(Zacks et al. 2001, 651).

“(..)observers encode events hierarchically, grouping small event parts into larger events”(651).

An example could be opening the refrigerator to take some water. First you place your hand on the handle, then pull, then place your hand on the water, grab it, lift it out and then you close the door.

Normal actions are carried out by agents according to their

intentions<sup>3</sup> (Malle & Knobe 1997). The intention of the agent by performing the action is to achieve a goal (quenching thirst). This goal is caused by the beliefs (water will help, it is in the fridge) and desires (thirst) of the agent. This is the basic representational format of intentional action: Agent – Action – Goal.

<sup>3</sup> Intention is a notoriously difficult term. To circumvent a longer philosophical digression, let me clarify what is understood by the term here. Following Daniel Dennett, intention is understood as belief and desire of the agent performing the action (1987).

Actions are typically divided into smaller units of movements that don't have a goal by itself (putting the hand on the refrigerator handle, grabbing the water). Just as an action can be structured hierarchically, goals can be structured in hierarchies that make up goals at a higher level:

When I open the refrigerator and take out a bottle of water to drink, the goal of this sequence of actions is to drink. The individual units, open refrigerator door, take out bottle, put bottle to mouth, do not make up for a goal, but are "sub-goals". Likewise, the choice of drink may be part of a larger goal of losing weight by not drinking anything with sugar or fat. Now this is a "super-goal".

|                     |               |                |
|---------------------|---------------|----------------|
|                     |               |                |
| Sub-goal            | Goal          | Super-goal     |
| "Open refrigerator" | "Drink water" | "Loose weight" |

The goal at any level is determined by the beliefs and desires of the agent: the desire is to quench thirst and the belief is that there is water in the refrigerator which will quench the thirst. Actions are normally comprehended according to this intentional format, but in order to understand the next divisions we need to make one crucial distinction.

On the one hand we have the perceptual structure<sup>4</sup> of the action, which is composed of an agent performing an action that provokes a reaction. I move my hand to the handle of the refrigerator and pull. The reaction of this is that the refrigerator door opens. The series of actions lead to a goal state. This will often be entailed by the reaction of the last action of the sequence, but need not be.

On the other hand we have the intentional structure which is the representation of the perceptual structure.

Figure 1 represents the central components of the perceptual structure and the intentional structure plus the relationship between them.

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<sup>4</sup> Perceptual structure can be visual, auditory, tactile or any combination hereof. It does not differ whether the agent is in the first second or third person. Recent research implies that the same representational mechanisms are used for 2<sup>nd</sup> and 3<sup>rd</sup> person movement as for the first person (Gallese & Goldman 1998).

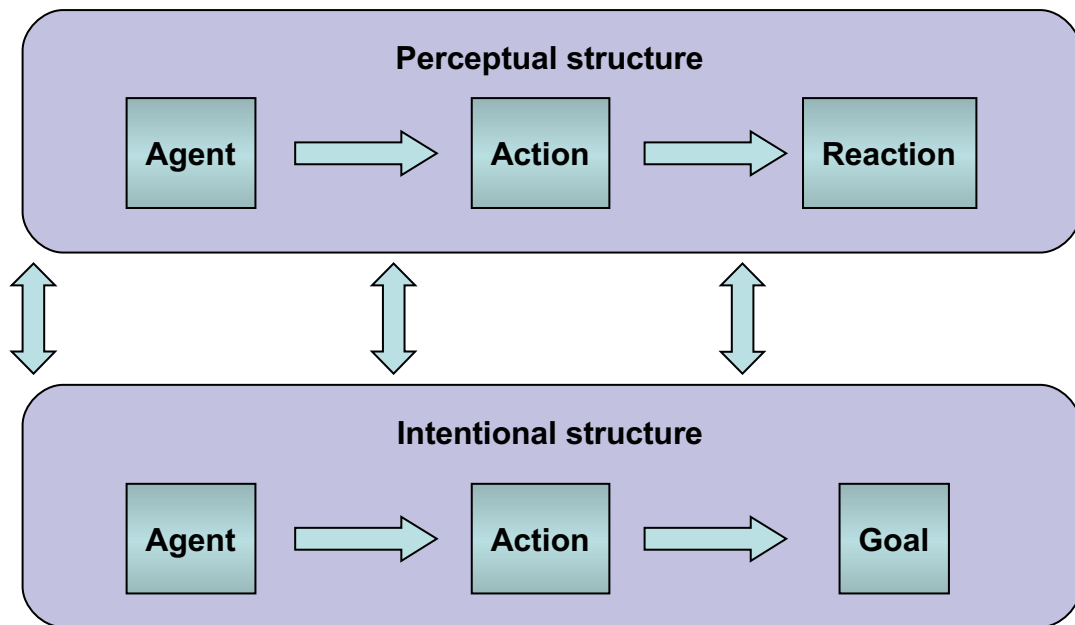


Figure 2 The perceptual and intentional structure of action.

#### Deficient action

Sometimes the perceptual structure does not lend itself readily to an intentional structure.

Something is missing in the perceptual structure for the cognitive system to build an intentional structure. I will call this type of action deficient in the intentional structure or just “deficient action” (Wegner 2002).

This is a category with many kinds of actions that we encounter on a day to day basis, but most important to the present purpose is that ritual action is characterized by being deficient in the intentional structure. Like religious ideas being a subtype of counterintuitive ideas, ritual action is a subtype of deficient action.

When action is repeated again and again such as repeating the same word it is deficient because the intention is not to communicate. When a sparkingly clean infant is dipped in water three times, it is deficient because the intention is not to clean it, as is usually the intention when you put an infant in water.

We can therefore distinguish between ritual and all other types of action. Figure 3 shows the divisions we made to get to ritual action.

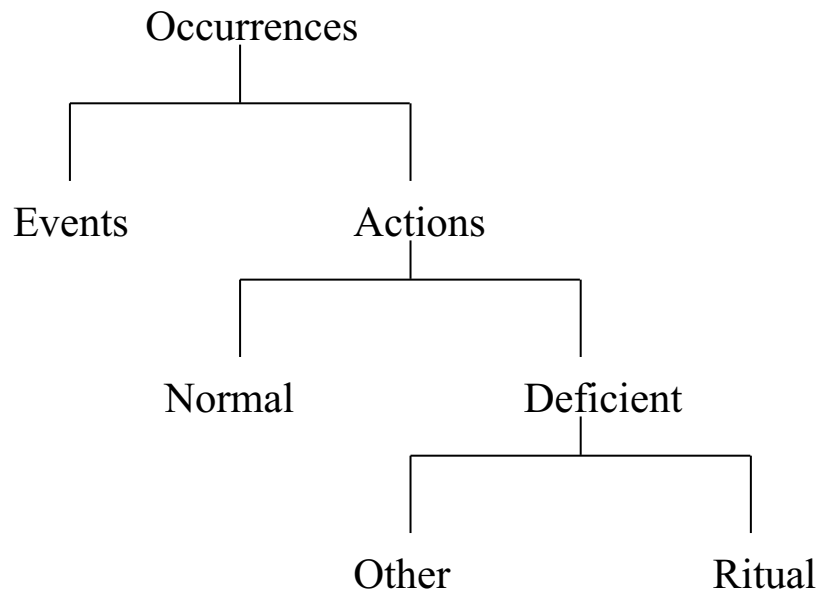


Figure 3. Classification of occurrences

Other authors have made similar observations about the characteristics of ritual. Caroline Humphrey and James Laidlaw call the deficiency a “displacement of intentionality” (Humphrey and Laidlaw 1994)<sup>5</sup>, Pascal Boyer and Pierre Liénard call it “goal demotion” (Boyer & Liénard 2006, and at the extreme, Frits Stahl calls it meaningless and downright rejects the intentionality of the action (Staal 1979).<sup>6</sup> These expressions all seem to aim at the fact that there is incongruence between the perceptual structure of the action and the intentional structure in ritual action.

The psychologist Daniel Wegner has also attacked this problem, although not from the perspective of ritual studies. To him it is a general phenomenon that humans can become confused at the source of the intention behind their own movement in certain situations (Wegner 2002).

Deficiency can arise in two ways: either because the relation between the agent and the action is unclear, or because the relation between the action and the reaction is nonspecific. If we start with the first situation, shuffling a deck of cards is a good example. When poker players insist that the deck of cards be shuffled, it is because they do not want the dealer to consciously decide which cards will be dealt to every single person. The point of shuffling cards is to eliminate the intentional

<sup>5</sup> I should add that their concept of intentionality differs from the one expounded here, because they speak from a phenomenological philosophical perspective. Never the less I believe that the *phenomenon* they illuminate is the same, although the philosophical framework in which they treat it differs.

<sup>6</sup> A similar observation was made by Dan Sperber who identified symbolic behaviour, such as ritual, as that which does not have a rational (meaning intentional in this context) explanation (Sperber 1975).

control of the action of dealing cards subsequently. This type of deficiency stems from a lack of control by the performing agent of the action. To put it another way, the conscious control of the action is deliberately sought eliminated. Thus the perceptual agent is eliminated in the intentional representation of the action.

The second situation arises either when the reaction cannot be traced to the action. This is what we see in the case of illusionists: remember Uri Geller bending spoons with his mind or David Copperfield making all manner of things disappear. The reaction, that is, the bending or the disappearance, cannot be traced to the actions of the agent. Another way this can happen is when there is incongruence between the expected goal of the action and the manifest reaction. If for example I open and lock the door seven times before leaving my house, there is incongruence between the goal and the manifest reaction: if the goal was to lock the door, locking it one time would be sufficient, but doing it seven times raises doubt as to the true goal.

Wegner has studied the first type of situation where the agent is not in control of the action. He notices: “when we see an action we immediately require that someone did it. If we cannot trace the origin of the action to [a] mind (..) we never the less insist on the origination in some mind” (Wegner 2002: 143). This, I believe to be a general phenomenon. The response of the cognitive system is akin to the reaction noticed long ago in linguistics. If we hear only half of a sentence, we can still reconstruct the meaning. This process is called “repair” (Schegloff, Jefferson & Sacks 1977). Similarly the cognitive system will try to repair the intentional structure when parts are missing. Faced with a deficient action the cognitive system will try to repair the intentional structure (Zacks et al. 2001, 651).<sup>7</sup>

This repair takes different forms depending on where the deficiency is located. The first situation where the agent is not perceived to be in control of the action, Wegner calls it “movement confusion”, the second type of deficiency where there is incongruence between action and reaction, we could call “apparent absurdity”.

In the first situation we have an agent repair. An alternate agent is introduced as the author of the action because the manifest agent is not perceived to be in control of the action. Basically, what the cognitive system does is to ask “who then did it?”. This agent will inevitably be a hidden or a counterintuitive agent, since it is not visible. These will often be a god, a spirit, an ancestor or

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<sup>7</sup> One important observation is that deficient actions are not necessarily reflected upon, so it is not necessary that the repair process is applied. It is necessary that one is prompted to reflect on the action. It is possible that other features of ritual such as ritual pomp and stereotypy play a role in stimulating reflection on the action by focussing attention.



maybe even the subconscious<sup>8</sup> depending on what is current in the local culture. This type of repair is most common in divination, where we will often see randomization techniques that serve the purpose of eliminating the control of the manifest agent. As a product of this the divinatory pronouncement will typically be attributed a counterintuitive agent such as a spirit or the ancestors.

In the second situation we have a goal repair because the goal is not caused by the action. Faced with apparent absurdity, the cognitive system will try to find out “what then happened?”. Typically an alternate reaction will be introduced. This will similarly be a counterintuitive reaction, since it will typically be removed in time (getting well because of a healing ceremony) or hidden from perception in the case where some quality is “changed” (like becoming a minister after ordination). This corresponds to two types of ritual: magic and rites of passage. We will now look at a few illustrations of these processes.

### Ouija board

Ouija board consultation is an example of modern form of divination. Let us look closer at this. The Ouija board is familiar to most people. Some trace the origin to antiquity, but the version known in modern times was initially manufactured in 1890 by Charles Kennard in Baltimore (Wegner 2002: 109). Today it is copyrighted by Hasbro (perhaps more well known for monopoly, a similarly puzzling activity, but that is unfortunately outside the scope of this paper). On the board there are the letters of the alphabet, the numbers and a yes and a no. It is used with a planchette which is a kind of pointer that slides very easily on the board. It is typically operated by two persons, but more are allowed. The participants all place their fingers on the planchette and ask a question. Then they collectively move it around the board and it indicates the letters of the message (Wegner 2002: 109-111).

We can imagine a Ouija board consultation by Emily and Carrie. Emily and Carrie move the pointer repeatedly producing a sequence of letters. These letters form a message. The perceptual structure is clear enough, but there is a deficiency because Emily and Carrie are not in control of the action.

Wegner calls this 'movement confusion' that is: “difficulty in tracking the relation between

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<sup>8</sup> An example of this is the surrealist movement, where the automatic writing had the function of making the author not in control of the goal. In some ways the subconscious was repaired as the true author and it was endowed with special counterintuitive qualities such as superior poetic poise.

intentions and observed actions” (Wegner 2002: 112). It is simply not clear what intention is guiding the action. The intentional structure of the action is perceived as deficient. My hypothesis is that this initiates an agent repair whereby a counterintuitive agent is introduced as the intentional agent of the action. Often it is considered a spirit, but the preferred cultural framework of counterintuitive ideas may determine any other counterintuitive agent, such as angels, demons, avatars, gods or aliens. The goal is still the same, a message, but the repaired intentional structure represents the Ouija consultation as a communication of this message by a spirit (see figure 4).

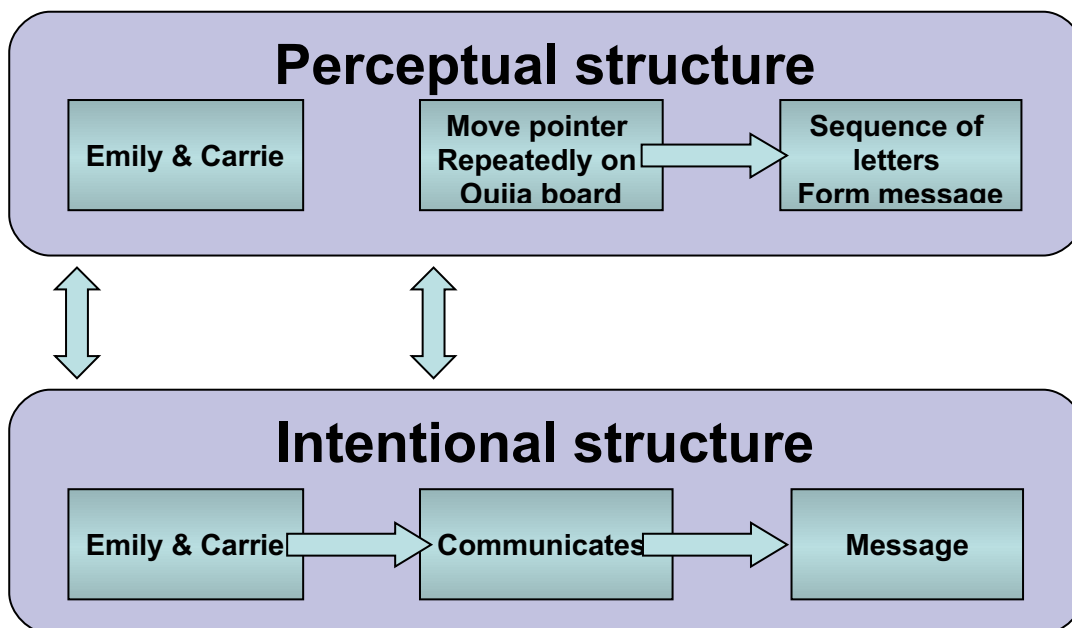


Figure 4. Ouija board consultation.

### Greek Magical Papyri

The Greek Magical Papyri is a book of magical spells from the 4<sup>th</sup> century AD. They were found in Egypt, but the practices mentioned are known from the whole Roman Empire (Cf. Betz 1992). In this book one can find magical rituals for virtually any pertinent problem. The ritual found in Papyri graecae magicae VII.429-58 is described as “A restraining [rite] for anything, works even on chariots. It also causes enmity and sickness, cuts down, destroys (..)”. The ritual is described thus “Engrave in a plate [made] of lead from a cold-water channel what you want to happen, and when you have consecrated it with bitter aromatics such as myrrh, bdellium, styrax, and aloes and thyme, with river mud, late in the evening or in the middle of the night, where there is a stream or the drain of a bath, having tied a cord [to the plate] throw it into the

stream”.<sup>9</sup> The perceptual structure is clear enough, an engraved plate is thrown into a stream in the middle of the night, but the goal of that action is elusive. It is apparently absurd. Therefore the action is deficient in its intentional structure. Since the goal is deficient, a goal repair is initiated. A new goal is substituted for the apparently absurd one. Now the reaction is altered to be the goal engraved by the ritualist in the plate. This goal is counterintuitive since it is removed from the actions actually performed.

We can see how the deficiency in the perceptual structure opens up for the introduction of a counterintuitive goal.

### Baptism

The last example is an example of a rite of passage. Baptism is known to most Christians. Although there are several different ways of performing baptism all denominations use water that comes in contact with the skin. Most Christian denominations practice child baptism. A common proceeding would be that the infant is being held by its parents. The priest is pouring a small amount of water on the head three times while pronouncing some words related to the christian god. Usually operations on an infant involving water would be performed for the purpose of cleaning. The infant is, however, already sparkingly clean. Consequently a deficiency in the intentional structure arises. The action is apparently absurd: if the water was not used for cleaning the baby “what then happened?”

Since the action appears intentional, a repair process is initiated in order to account for the intentional structure of the action. This process is a goal repair, since the agent seems quite manifest. But unlike the previous example we do not introduce an alternate goal, but rather an a change in essence of the object manipulated, ie. the infant. This change of essence is one from pagan to christian and it is counter intuitive since biological entities are not intuitively able to change their essence: a horse wil remain a horse regardless of being painted white with black stripes to resemble a zebra.<sup>10</sup> The infant is no longer a “pagan” but different entity in its essence. The ritual staging allows us to build a counter-intuitive representation of a change of essence. This representation is in turn connected to the existence of the Christian god, but does not necessarily need to be tied directly to any god spirit or ancestor. We often see this in rites of passage around the world, for example among the Baktaman (Barth 1975).

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<sup>9</sup> (trans. Morton Smith in H.D. Betz (1992)

<sup>10</sup>Research by Lawrence Hirschfeld has shown that human are categorized according to an essence. Being something is like belonging to a natural kind similar to a species. Species can not change and they normally remain the same regardless of outer appearance (Keil 1989)

## Conclusion

The purpose of this paper has been to find out why religious ideas seem to be consistently attached to the special kind of action that ritual is. An analysis showed that religious ideas are a particular subset of ideas in general. Likewise ritual is a particular subset of actions in general. A more detailed analysis of the characteristics of ritual revealed that ritual action is characterized by a deficiency in the intentional representation of the action, which arises through incongruence between the perceptual and representational structure of the action. This deficiency provokes a repair of the intentional structure in the human cognitive system. In this process either a counterintuitive agent, an agent repair, or a counterintuitive goal, a goal repair, is introduced to repair the intentional structure of the action.

To borrow an analogy from fluid dynamics the character of ritual action creates a vortex in the intentional format, the intentional representation is subjected to a depression. This vortex subsequently drags in counterintuitive ideas supplied by the surrounding catalogue of religious ideas current in the local culture to fill this depression. The ritual vortex is thus the key to understanding why rituals are characterized by such peculiar action and why this peculiar action is attributed religious meaning.

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