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# Cultural syndromes: Socially learned but real

Síndromes culturais: socialmente aprendidas mas reais

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## ABSTRACT

While some of mental disorders due to emotional distress occur cross-culturally, others seem to be much more bound to particular cultures. In this paper, I propose that many of these “cultural syndromes” are culturally sanctioned responses to overwhelming negative emotions. I show how tools from cultural evolution theory can be employed for understanding how the syndromes are relatively confined to and retained within particular cultures. Finally, I argue that such an account allows for some cultural syndromes to be or become mental disorders and also steers clear of some of the anti-realist trappings associated with a social constructivism of cultural syndromes.

**Keywords:** cultural syndromes, mental disorders, emotional distress, cultural evolution, social learning, social constructivism.

## RESUMO

Enquanto alguns transtornos mentais devidos a problemas emocionais se manifestam através de diferentes culturas, outros parecem ser muito mais circunscritos a culturas específicas. Nesse artigo, proponho que muitas dessas “síndromes culturais” são respostas culturalmente sancionadas a emoções avassaladoramente negativas. Mostro como ferramentas da teoria da evolução cultural podem ser empregadas para compreendermos como certas síndromes podem ser relativamente confinadas a culturas específicas. Finalmente, argumento que tal explicação também evita algumas das armadilhas antirrealistas associadas ao construtivismo social sobre síndromes culturais.

**Palavras-chave:** síndromes culturais, transtornos mentais, angústia emocional, evolução cultural, aprendizagem social, construtivismo social.

## Introduction

There is by now considerable agreement that most emotions are adaptive or at least broadly functional (Frank, 1993; Tooby and Cosmides, 1990; Linquist, 2007; De Block and Cuypers, 2012). Still some emotions pose not only occasional but systematic challenges to our well-being: we are overcome by sadness, grief and loss; we become traumatized by fear and shock related to violence and war; and we develop mental disorders due to emotional suffering. While some of these mental disorders due to emotional distress occur cross-culturally, others seem to be much more bound to particular cultures. In this paper, I propose that many of these “cultural syn-

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dromes" (CS) should be understood as culturally sanctioned responses to overwhelming negative emotions. I propose that tools from cultural evolution theory can be employed as a framework for understanding how the syndromes are confined to and retained within particular cultures, while also steering clear of some of the anti-realist trappings associated with a social constructivism of cultural syndromes.

I proceed as follows: I begin by offering some examples of cultural syndromes ("Cultural syndromes"). In "Social learning of cultural syndromes," I explore how cultural evolution theory might account for the cultural retention and variability of such syndromes. I argue for the need to include motivational biases in addition to cognitive and environmental scaffolding in the account of social learning as a mechanism for cultural retention and reproduction. Finally, in "Are cultural syndromes social constructions?," I turn to the more philosophically oriented task of showing how a cultural evolutionist need not be committed to a social constructivism of cultural syndromes and can allow for them to be or develop into mental disorders.

## Cultural syndromes

DSM-V defines *cultural syndromes* as, "clusters of symptoms and attributions that tend to co-occur among individuals in specific cultural groups, communities, or contexts... that are recognized locally as coherent patterns of experience" (APA, 2013, p. 758). Although some examples of cultural syndromes are included in the DSM-V, there is considerable controversy about the nature and scope of such syndromes. For example, what the DSM-IV referred to as "culture-bound syndromes," is with now replaced with "cultural syndromes" to reflect that some previously classified syndromes were not cultural bound *per se*, but instead syndromes which displayed cross-cultural variations in terms of different presentations in different cultures (APA, 2013; see also Lewis-Fernandez and Kleinman, 1995). While this move potentially has the effect of narrowing down the category, some have in contrast argued that the extension of cultural syndromes might be wider than how it is currently being employed by the DSM-V. For example, it has been argued that some predominantly western disorders, such as bulimia nervosa and anorexia could just as well be understood as a cultural syndrome even if DSM-V classifies it as an (cross-culturally occurring) eating disorder (Littlewood, 1996). Finally, it is worth emphasizing that cultural syndromes might be no less serious or less requiring of professional assistance than other *cross-cultural* anxiety or distress disorders (Sumathipala *et al.*, 2004).

While it is important to keep such issues in mind and not make too much of either the "cultural" or "culture-bound" prefix, what both DSM V and most of cross-cultural psychiatry nevertheless recognize, is that there is a class of ailments and syndromes that are comparatively more confined and recognized amongst some cultures than others. Here are some examples of plausible candidates. Linda-Anne Rebhun, a medi-

cal anthropologist studied interrelated group of syndromes a northeast of Brazil, such as *nervos* (nerves), *sustois* (shock sickness), and *peito aberto* (open chest). Rebhun explains that all of these ailments have to do with the experience of strong emotions such as shock or anger, or as the culture terms it, "swallowing frogs" (*engolir sapos*). For instance, *peito aberto* refers to the state of dangerous emotional openness to one's own and others anger and "is said to be caused by carrying too much weight, which makes the heart expand, opening the chest, and allowing evil influences to enter" (Rebhun, 1994, p. 369). The syndrome also comes with a very specific means of diagnosis and treatment. The diagnosis is performed by measuring a string twice against the patient's forearm and then looping it around the chest; if the measured length does not close securely around the chest (and it never does), a diagnosis of the syndrome made. The treatment of the syndrome occurs by Folk Catholic faith healers using prayers, and pushing inward on the chest and breasts. Then the string is measured again and again looped over the chest; this time, if the treatment is successful, it fits. Relief is thought to be immediate but temporary, because the situations that give rise to *peito aberto* are recurrent.

A more publicized example of a cultural syndrome is from Cambodia: *Khyâl ko* (wind overload). *Khyâl ko* is one of several "khyâl attacks." These syndromes were already present in the Cambodian culture prior to becoming a French colony, but have since then become integrated with and are often understood in terms of the collective trauma after the Pol Pot regime. *Khyâl* is understood to be a wind-like substance moving inside the blood vessels inducing attacks and disturbances in different parts of the body (Hinton *et al.*, 2001). According to psychiatrist Devon Hinton and colleagues, *khyâl ko* is associated with dizziness, shortness of breath, and neck soreness, and is amongst other things felt upon rising from standing and "results in orthostatic panic, that is, panic upon rising from lying or sitting to standing" (2009, p. 299). The sensations related to standing are also associated with triggering flashbacks of syncopal (brief loss of consciousness) episodes during the Pol Pot regime that brought many Cambodians in forced labour camps to the brink of starvation.

## Social learning of cultural syndromes

As the above examples brings to a fore, cultural syndromes typically occur in relation to the experience of overwhelming negative emotions, including fear, anger, anxiety, shock and panic (Sumathipala *et al.*, 2004; Hinton *et al.*, 2009). At the same time, these syndromes are intimately connected to specific beliefs systems and practices of a particular culture. It is at this juncture of cultural dependence and physical/emotional dependence that the cultural evolutionary framework provides some insights into how these syndromes come about and are retained within specific cultures.

Consider the cultural syndrome *hwa byung* (fire sickness), which involves symptoms of abdominal pain sensations related to the experience of anger that is found not only in Korea but also amongst Koreans in the United States (Lin, 1983). On a first approximation, we might think that such a syndrome represents a means of coping and making physical sense of negative emotions (like anger) that overwhelm the individual. However, without an historical or evolutionary perspective, such a cursory understanding does not make sense of why an individual would adopt such seemingly maladaptive behaviour – surely there are many other ways of coping? In fact, one would expect there to be some individually tailored or situation-specific means which would be better suited to understanding and coping with the negative emotions. In other words, we require some tools from cultural evolutionary theory to explain the reliable retention of CS given the *prima facie* possibility of being “washed out,” for instance by completely novel or individual means of coping with negative emotions?

The problem described here is a version of the general problem for the dual (gene and culture) inheritance framework adopted by cultural evolutionists. Sterelny (2006) for example describes it as a paradox inherent in how social learning could be a reliable mechanism for inheritance. Based on the sophisticated cognitive capacities that are precisely required for culture, we would expect it to be more likely that the individual's behaviour will become more flexible depending on her past experiences and her ability to adapt to context-relative features. Arguably, the experiences of negative emotions, with their variable strength and valence, are precisely where we would imagine the means of coping would be flexible.

Now to resolve this paradox, dual inheritance advocates are likely to draw on cognitive biases like *conformist biases*, the tendency to copy the most common variant of local practice, and *content biases*, the tendency to copy variants that are easy to remember and transmit, to explain the reliable retention and inheritance (see, Richerson and Boyd, 2008). But it is unclear how much help this would be in the case of cultural syndromes. Cultural syndromes do not necessarily represent the most prevalent way of coping with negative emotions even within a culture. As such, they seem less “frequency dependent” than other proposed culturally transmitted traits that typically interest cultural evolutionary theorists. And although the relationship between CS and their accompanying rich narratives may render them particularly memorable models for coping, it is unclear how this feature could explain how syndromes are relatively confined to some cultures. One would expect that memorability alone would either outcompete other variants and lead to a spread *between* cultures.

Sterelny's own solution focuses on cultural variants such as tool use, cooperative norms, and agriculture. He suggests that prior generations do not simply contribute by providing models that can be the targets of social learning; they are also responsible for modifying and scaffolding the selective environment for the traits (2006). The appeal is thus to *cultural niche construction* and *scaffolded learning* in explaining the reliable retention of cultural traits.<sup>2</sup> In the case of CS, we can imagine that the selective environment would involve the cultural-specific narratives that scaffold both the *understanding* of one's predicament and also the *learning* of particular models for coping with overwhelming stressors and emotions. The fact that many of these syndromes are typically only *partially* manifest in behavior of the models does lend support for the idea that scaffolded learning by means of narratives and so on would be required to bolster the successful transmission of the complete model and beliefs attached to cultural syndromes (see Godman, 2015).<sup>3</sup> This also seems to be one of the themes of Ian Hacking's account of transient mental illness that emphasizes the role of individuals interacting with certain labels and beliefs about themselves in a cultural niche as contributing to the spread and changing nature of disorders (Hacking, 1998).

While I am generally sympathetic to evoking cultural niche construction and scaffolded learning for addressing the retention and accumulation of cultural variants, I think Sterelny's account would be strengthened if it also drew on motivational biases as well as biases in the selective environment. In particular, I would like to argue that *social motivations* might be key for ensuring the retention and cultural variation of traits such as cultural syndromes. This is not the place to give a complete argument for the unique and potentially privileged role for social motivations in explaining the evolution of cultural variants in general (see Nielsen and Blank, 2011; Heyes, 2012; Godman *et al.*, 2014); instead I will merely sketch some of the empirical support for the role of social motivations in social learning and indicate why I think they seem particularly fit to explain the cultural specific retention of cultural syndromes.

Following Cecilia Heyes, I take social motivations to be understood in this context as input mechanisms for our (social) learning process, where they have the role of privileging information from social channels, e.g. information provided by *people* in our environment. In other words, it need not only be information provided by imitation or mimicry, but observation of social stimuli in general (Heyes, 2012). One means by which social motivations are able to privilege or bias such information is by making the process of learning from others, through social observation and interaction, more enjoyable

<sup>2</sup> Paired with *cultural group selection*, the account would thus allow us to hold that CS might be individually maladaptive yet beneficial for the group as a whole (for instance by being a means of enforcing norms and cohesion within the community).

<sup>3</sup> Linquist (2007) also explores Sterelny's proposed problems in the context of a dual-inheritance model for *emotions*, such as guilt, arguing that acquisition in early childhood along with strict vertical parent-offspring transmission can account for the reliable inheritance of emotions. I do not dispute Linquist's solution for at least some emotions, but think they are not as applicable in the case of CS for the simple reason that they do not typically arise early in development.

and rewarding than what individual action and learning is or would be (Godman, 2013).

This proposal finds support in developmental and comparative psychology where social motivation is a strong contender for explaining various features attached to the pan-cultural human propensity for so-called *overimitation*, i.e. the tendency to reproduce a high fidelity match of the model's behavior to the extent that the task efficiency is reduced (Nielsen and Tomaselli, 2010). When we overimitate we do *not* reach the goal in the most *effective* way possible, but try to do it in precisely the way it has been modeled to us. Children begin to overimitate at the age of two and are also more prone to copy demonstrators with whom they have a prior social bond than strangers (Nielsen and Blank, 2011). As children mature between the age of three and five, they have an increased tendency to overimitate and adults do it just as much as five-year olds do (McGuigan *et al.*, 2011).

These results from overimitation studies cannot be attributed to failures of competence as a famous study shows that chimpanzees can copy full behavioral sequences involved in similar task designs, but tend to eliminate redundant components of the sequence when the causal relation between actions and outcomes become apparent (Horner and Whiten, 2005). Instead, social motivations provide a compelling explanation of the prevalence of overimitation amongst humans. The thought is simply that reproducing the complete modeled actions of another human being is more important than merely producing the outcomes more efficiently. We are not only motivated to perform the task itself but also motivated to engage with others because of the social rewards conferred by such activities. That is, imitation, overimitation, and social learning more generally, does not merely function as a means of learning skills or acquiring information about the world; they also function as means of enjoying and engaging with others, which in turn facilitates the formation of social bonds (Uzgiris, 1981; Nielsen and Blank, 2011; McGuigan *et al.*, 2011). Social learning in contrast to individual learning thus not only represents an opportunity for adopting behavior from parents and other peers, but also for partaking in the social rewards attached to interacting with these peers. Moreover the proposal makes sense from an ontogenetic and phylogenetic perspective; involving social motivations in human learning allows us to bond and affiliate with our peers and community – something which is crucial to wellbeing and, indeed, survival (Chevallier *et al.*, 2012; Godman, 2013).

A reasonable prediction based on the social motivation hypothesis for the overimitation studies is then that whenever the opportunity for social rewards and bonds are particularly salient part of the target for learning, *how* the effect is produced will matter more than that it is produced in the most effective way possible – indeed, it seems, sometimes it will matter more than that the effect is produced *at all*. I contend that this is precisely what is going on in the case of CS as a means of coping with and getting recognition for our psychological and emotional challenges. The clusters of symptoms and attribu-

tions associated with particular CS are reliably reoccur within a culture because the *means* of coping with negative emotions are often more important than the *ends*, i.e. that one copes with the emotion in question. A weaker, and perhaps more plausible proposal along similar lines is that overwhelming negative emotions can be just as successfully – or unsuccessfully – dealt with by various means, but individuals who copy existing models in their culture at least reap additional social benefits associated to reproducing those variants favored by that culture.

The salient thing with cultural syndromes (and indeed the reason that that they are lumped together) is that they then tend to be precisely *confined within specific cultures*. We can now explain this because of their exclusive role within the very culture to which the individual belongs. Overwhelmed by negative emotions individuals can use the culturally available resources represented by existing models of syndromes, and in the process affiliate themselves with others of the same culture and get access to medical and community support. This then not only explains the CS retention within cultures, but also variability *between* cultures. For example, other models of managing overwhelming anger than *hwa byung* (fire sickness) are not going to be an option for most Koreans even if they are more effective since they are not going to facilitate recognition and affiliation amongst peers. Consistent with the social motivation hypothesis, some syndromes might also develop due to the motivation to adopt models that helps that individual avoid implicit or explicit social disapproval or stigma. While the same individuals are in some sense free to use any even more efficient means available for coping or dealing with negative emotions or disorders, not just use the culturally sanctioned means, they will then risk losing out on the social rewards of conforming – or incur social stigmatization.

## Are cultural syndromes social constructions?

So far, I have explored how we might explain the retention and cultural variability of cultural syndromes by drawing on tools from cultural evolution theory where the models of coping with overwhelming negative emotions represent culturally selected and reproduced variants. In particular, I have argued that social motivations along with niche construction are an important element in the cultural transmission of CS, since they jointly explain why the particularities for *how* to cope with negative emotions are retained even in contexts where there are more successful competing models.

But what implications does this have for treating CS as actual *syndromes* or even *mental disorders*, which themselves require treatment and medication for alleviation? After all, not every syndrome finds its relief by friendly conversations, prayers and local healers; some might require interventions by more cross-culturally recognized medically and psychiatrically educated professionals and perhaps assistance from pharmaceuticals. So while CSs might represent the principal

culturally sanctioned means of coping with certain negative emotions and traumas that is not to say that they are easily dispelled. In fact, they are often co-morbid with other anxiety and distress disorders (Guarnaccia and Rogler, 1999). In this section, I want to argue that worries about not taking CS seriously as disorder would only apply if one is committed to anti-realist interpretation of the variants of cultural evolution theory. Fortunately, the account at hand is not committed to this interpretation.<sup>4</sup>

According to an anti-realist interpretation of CS, the syndromes are truly narrative- or belief-dependent, or to use jargon, “social constructions,” such that if the individual did not have the narratives or beliefs they would not develop the syndrome. This interpretation would be natural if we understood CS as primarily explained by the particular, and often false, (inherited) belief system of the culture. The social learning argument of the last section might on such an interpretation be understood as indicating that the way CS is transmitted is primarily by belief adoption: one only develops the syndromes as a result of believing that the emotions and further symptoms one experiences conform or are in line with the cultural models.

The problem with such an account is not so much what it says – but what it leaves out. Certainly, the specific cultural beliefs play some role in the development of the cultural syndromes, as they do in diseases and disorders more generally. Perhaps the clearest case is of functional somatic disorders like irritable bowel syndrome and fibromyalgia, where the condition partially depends on the individual’s interpretation of their emotions or physiology in order for the syndrome to develop (Wesseley *et al.*, 1999).<sup>5</sup> The beliefs here play a causal role which often make matters worse for the individuals, or, at least in the short-term, through generating certain feedback loops (Hacking, 1998). And the same belief-dependency is arguably relevant in many physical illnesses. So the mere belief dependency requirement these syndromes does not seem to be sufficient to mark out cultural syndromes as social constructions.

Certainly culture specific beliefs are typically involved in CS, such as in the case of *khyâl ko* where any expected dizziness is interpreted as being due to a wind-like substance in the blood vessels. All the same, the emphasis on the interaction with the cultural beliefs anti-realist social constructivists tends to leave an important element of the story, namely that the overwhelming negative emotions like distress, anger and anxiety makes a real and, I contend, typically more important

causal contribution to the development of the syndrome than the beliefs. In the case of *khyâl ko* this is evident in the fear that overwhelms the cognition and make some Cambodians hyper-vigilant to any sensation they may feel on standing (Hinton *et al.*, 2009). Not only do the emotions underwrite the counterfactual just as beliefs do (if the person had not been overwhelmed by these emotions, they would not have developed the syndromes), they also provide the *conditions* for self-ascription and potential feedback-loops, which make her beliefs causally relevant. That is, if the individual had not been overwhelmed by the negative emotions she would be unlikely to ascribe the particular narratives and find affinity with the cultural models for coping.<sup>6</sup> In addition, from the perspective of cultural evolution, a person must experience strong or overwhelming negative emotions that cause suffering or reduced fitness before an identification with the models of dealing with these emotions and exposing oneself to the costs associated with the syndrome will be worthwhile.

Another way in which social constructivism of CS focuses too narrowly on belief-dependence is that, as we saw in the last section, a rather complex set of “biases,” which are cognitive, ecological as well as motivational, must be in place for CS to be socially learned and retained within a particular culture. It thus seems sensible not to view social learning primarily as a means of belief transmission but rather as a more general capacity for learning cultural behavior related to the need for social affiliation. This has implications for what kind of science and possible interventions we should expect to be productive in the case of CS. Ethnographic and anthropological studies may still be fruitful in discerning the beliefs involved in cultural narratives and attributions of syndromes. The particular cultural evolution account I favour however implies that we should be sceptical toward the particular *content* of the beliefs being part of the explanation for *why* particular models or variants of coping were selected and survive over others (cf. Sperber, 2000). After all the social learning mechanisms operate largely independently of the content of the particular cultural beliefs about the syndrome. In particular, I have argued because of our biasing social motivations, “who” we are learning and seeking sanction from often matters more than “what” we are believing in order to cope. Moreover, both the relevant triggering emotions and the social learning mechanism, which explain the retention and cultural variability of CS, are by in large pan-cultural. As such cultural syndromes should also still be studied as part of cross-cultural psychology and psychiatry.

<sup>4</sup> It may be that there are some things that are considered CS where such social constructivist anti-realism is justified. Here I am concerned to show that a cultural evolutionist of CS need not accept anti-realist conclusions.

<sup>5</sup> This is not to deny that irritable bowel syndrome and fibromyalgia could also be Western cultural syndromes – indeed they might well be.

<sup>6</sup> Of course the emotions might themselves be in response to specific cultural pressures. For example, the syndromes in northeast Brazil seem linked to the gender-specific cultural roles and expectations, such that women are expected to contain their indignation and anger to a larger extent than men. The group of related syndromes are arguably also tailored as a means to sustain this gender role. But it would be a mistake to take all strong emotions as ultimately caused by social and cultural pressures, as some but might be in response to “non-cultural” features, like poverty or starvation.

Finally, I believe that the account I have proposed is at least consistent with the current recommendation for treatment and interventions of CS. People do not stop developing syndromes merely because other more effective model of coping suddenly become available and certainly not due to simply being told that the relevant beliefs attached to the syndromes are improbable or false. Cultural evolution may be much more rapid than biological evolution but past successful variants are rarely washed out within a generation or two. Instead, the recommendations for treatment of CS are typically in line with how to treat many other psychiatric disorders, like post-traumatic stress disorder and panic disorders such as taking both the initial anxieties and the illness attributions and representations as seriously as possible (Hinton *et al.*, 2009). In other words, by at least initially giving precisely *social* recognition to the syndrome and the sources of distress and despair.

## Conclusion

I began this essay by arguing that we can understand cultural syndromes on the cultural evolution account as culturally endorsed variants for coping with overwhelming negative emotions. Given that I argued for the prominent role of cultural narratives and social endorsement in the CS, I worried that one might take this to support an anti-realism about CS. While some constructivist insights about belief dependency and the possibility of feedback loops are correct, I nevertheless argued that the framework is impoverished as a general model for explaining cultural syndromes.

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