Understanding the Coordinative Function of Stylistic Conventions

Marc Slors

Abstract: Anthropological literature on culture shock assigns a social-coordinative function to stylistic conventions such as etiquette and dress codes. In the philosophical literature on the connection between conventions and coordination, however, it is frequently claimed that stylistic conventions do not solve coordination problems, conceived of as situations of interdependent decision making that can be modelled in game theoretical terms. I argue that the debate on conventions and coordination nevertheless provides tools for understanding how and why stylistic conventions serve a coordinative purpose. Some coordination games allow for stable equilibria only by means of public signals that are external to a game, known as correlation devices. I argue that such devices come in different kinds. In complementary coordination games, primary coordination devices allow for rules that specify role-divisions, while secondary correlation devices make existing role-divisions cognitively tractable. Stylistic conventions can be interpreted as correlation devices of the latter kind. We share etiquette and dress codes as secondary correlation devices that highlight who plays which role, which transactions in role-interactions transpire, and where specific role-interactions can be expected to take place.

Keywords: cultural conventions, coordination, conventions, stylistic conventions, David Lewis

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1. INTRODUCTION

Kalervo Oberg, the first anthropologist to have used the term 'culture shock' (in print[1]) described that phenomenon as "the anxiety that results from losing all our familiar signs and symbols of social intercourse. These signs or cues include the thousand and one ways in which we orient ourselves to the situations of daily life: when to shake hands and what to say when we meet people, when and how to give tips, how to give orders to servants, how to make purchases, when to accept and when to refuse invitations, when to take statements seriously and when not." (Oberg 1960, 177) This anxiety is felt by sojourners, expats, and anthropologists—anyone who must adapt to a new culture. They experience a "difference in interpersonal relationships [that] often comes at least as a minor shock" (1960, 181), because they can no longer rely on familiar ways to coordinate their social roles (as, say, friend, neighbour, employee, employer, customer, guest, host, etcetera) with the roles of others. I will be concerned with a subset of Oberg's "signs, symbols, and cues" that I will refer to as *stylistic conventions:* culture-specific rules and regularities pertaining to the form, design, and aesthetics of our social and physical environment. These include most prominently social etiquette, dress codes, and implicit norms about bodily composure (body distance, eye contact, gestures), as well as conventions about the styling of everyday utensils, interiors, buildings, and public spaces. In what sense can we say that such conventions can have a coordinative function?

The difficulty with answering this question stems from the philosophical tradition, starting with Hume and Hobbes and more recently David Lewis, of looking at coordination problems as situations of interdependent decision making that can be modelled in game-theoretical terms. Following Lewis, many philosophers conceive of conventions as Nash-equilibria in pay-off matrices that plot the combined outcomes of the various decisions that coordinators can make. The problem is that it is hard to understand e.g. etiquette and dress codes as conventions in this sense. As Andrei Marmor writes:

> Rules of etiquette have been mentioned as an example of conventions which are not explicable along the lines suggested by Lewis. Consider, for example, the convention of holding one's fork in the left hand.

1 Oberg references Cora Dubois' talk entitled *Culture Shock,* at a panel discussion of the first Midwest regional meeting of the Institute of International Education in Chicago, on November 28, 1951, in which she describes how the term emerged from discussions between anthropologists some 20 years earlier.

> That this rule is a convention is hardly deniable. (In some cultures, the convention is to hold the fork in the right hand, and in others, people are not expected to eat with a fork at all.) But it would be rather awkward to suggest that such a rule has anything to do with co-ordinating the behaviour of the agents in question. (Marmor 1996, 364)[2]

The aim of this paper is to argue, contra Marmor, that stylistic conventions do have a coordinative function. We can understand them as a variety of what is known as 'correlation devices': tools that allow people to coordinate their actions by using public signals and shared information. Correlation devices are usually described as items without which certain coordination strategies are inconceivable. But the term may also be used for items that make existing coordination strategies cognitively tractable. I will argue that stylistic conventions are correlation devices in this latter sense because they facilitate role-divisions and role-interactions.[3]

The set-up of the argument is as follows. In the next section, I will briefly sketch Lewis' theory of conventions in order to explain why and in what sense Marmor denies stylistic conventions a coordinative role. In §3, I will introduce the notion of correlation devices. In §4, I will discuss the use of 'markers' as correlation devices that enable coordination in situations where complementary roles are assigned. This may seem like a plausible option to understand the coordinative use of stylistic conventions. I will argue, however, that stylistic conventional markers are not suitable for the coordination of role *assignment*. Instead, they are used—abundantly—in role-*marking* as I will argue in §5. I will also discuss related uses of stylistic conventions in what we might call 'transaction-marking' and 'location-marking.' In §6, I will argue that stylistic conventions are secondary coordination devices relative to the primary coordination imposed by shared knowledge of how roles interrelate and what role-interactions requires. This will explain the fact that stylistic conventions can coordinate despite often being less than strictly rule-like. I will conclude by summarizing the extent to which Oberg's and Marmor's claims are compatible:

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2 To some extent Marmor might be mistaken. It may be argued that when people are seated close to each other, their elbows will touch frequently and annoyingly if each holds their fork in the hand they prefer. In polite circles such touching may be considered awkward. I will assume that Marmor has situations in mind where people are not seated too close to each other.

3 The argument in this paper is a thorough revision of an argument made earlier in (Slors 2021, 66–72) which hinged on the idea that stylistic conventions cannot be fitted into the Lewisian framework of connecting conventions and coordination. That argument did not take into account the notion of correlation devices and the ways in which it can be interpreted. Nor did it develop the idea of pimary and secondary coordination.

while Marmor may likely be correct to think that stylistic conventions do not have a primary coordinative function, Oberg's observations pertain to their secondary coordinative use.

2. LEWIS ON CONVENTIONS

Lewis defines coordination problem as "situations of interdependent decision by two or more agents in which coincidence of interest predominates and in which there are two or more proper coordination equilibria. […] [T]hey are situations in which, relative to *some* classification of actions, the agents have a common interest in all doing the same one of several alternative actions." (Lewis 1969, 24) Suppose a phone call is interrupted due to loss of reception. Who calls back? If both sides start calling back immediately, they will not reach each other; nor will they reconnect if both sides wait for the other to call. The classic stag hunt from Rousseau's *Discours sur L'inégalité* is another example. Every member of a given tribe is able to catch a hare on their own. This will supply dinner, but a poor one. Together they can hunt and kill a stag and eat well, but only if all cooperate. This requires some to close off the escape route for the hunted stag, which involves waiting. If nothing happens for a long time, it may become tempting to abandon one's post and catch a hare. If that happens, that person will eat poorly, but the rest will not eat at all. So if some of the hunters are frequently tempted to abandon their posts in order to catch a hare, it might be better to give up on stags altogether and let everybody catch their own hare. A final example: Two persons want to have dinner together tonight. There is no communication. Each goes to the restaurant where she thinks the other will go to.

Problems such as these can be analysed in terms of simple game-theoretic matrices that plot the payoffs of all possible action combinations (figure 1). In the phone call case things are easiest: there is a positive pay off for both if one calls and the other waits; if both call or both wait the pay-off is zero for both. In the stag hunt case, there is a good meal for all if there is general collaboration to catch a stag, a poor meal for all if they all catch their own hare, and a poor meal for one and no meal for the rest if there is a group effort to catch a stag while one person opts out. In the restaurant case, the pay-off for both participants is positive when both go to the same restaurant and zero when they choose a different one. It may be the case, though, that both coordinators have different preferences for restaurants—one for Greek, the other for Italian, say. In that case, when they do succeed in meeting at the Italian restaurant, the pay-off for one is higher than the pay-off for the other, even though none has a pay-off of

zero.

The pay-off matrices of these coordination problems all have more than one equilibrium. This is a combined outcome of actions such that when the game is repeated no one will benefit from choosing a different action, assuming that everybody else keeps to their original choices. Suppose that in the restaurant case person *B* actually likes Greek, but chooses to go to the Italian restaurant because that is where she (rightly) expects *A* to go, since she desires *A*'s company more than Greek food. If she has to choose again, going to the Greek restaurant will not improve her pay-off (assuming *B* will stick to her choice), even though the present pay-off of dining with *A* in the Italian restaurant is sub-optimal.

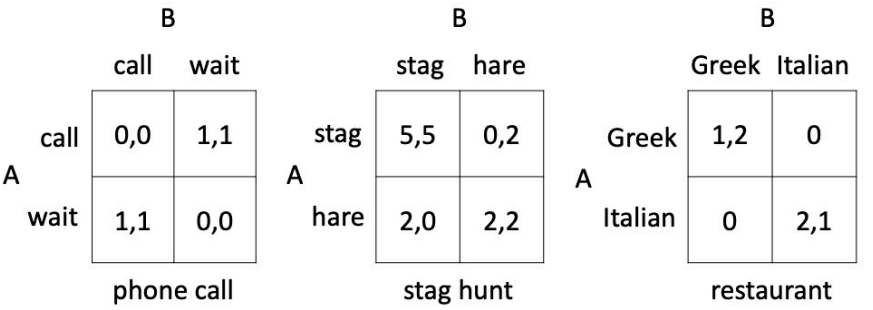

Figure 1. Simple coordination problems as game-theoretic pay-off matrices

The coordination process need not involve explicit communication. For example, experimental settings suggest that coordination partners who do not communicate, can reach agreement by opting for the most salient coordination options, that is, the ones that stand out from the rest by some unique feature (Schelling, 1960). Saliency is not always evident, nor is it always required. But once coordination has been achieved in one way or another, there is almost nothing as salient as precedent (see e.g. Shotter & Sopher 2003).

If a "present problem is suitably analogous to the precedents, we can reach a coordination equilibrium by all conforming to the same regularity. Each of us wants to conform to it if the others do; he has a *conditional preference* for conformity." (Lewis 1969, 39) And that is what a convention comes down to

on Lewis' account:

> A regularity *R* in the behavior of members of a population *P* when they are agents in a recurrent situation *S* is a *convention* if and only if, in any instance of *S* among members of *P*, (1) everyone conforms to *R*; (2) everyone expects everyone else to conform to *R*; (3) everyone prefers to conform to *R* on condition that the others do, since *S* is a coordination problem and uniform conformity to *R* is a proper coordination equilibrium in *S*. (Lewis 1969, 42)

In coordination problems such as the telephone case or the restaurant case, which of the equilibrium will end up being the solution to the coordination problem is arbitrary—each will do the trick. Thus, Lewis captures an essential characteristic of conventions: conventions are in an important sense arbitrary. Arbitrariness does not imply indifference. The case of driving on one side of the road—another one of Lewis' examples—brings this point out clearly. It is arbitrary whether we drive on the left-hand side of the road or the right-hand side. But once a convention is established, avoiding collisions is a very good reason to follow to it.

Marmor follows Lewis' analysis of conventions. His claim is that stylistic conventions are not solutions to Lewis-style coordination problems. Holding a fork in one's left hand is a case in point. But we can also think of dress codes or knowing when to shake hand and give tips. We may think that Marmor is too quick here. Dressing awkwardly, holding a fork in one's right hand or tipping inappropriately might be embarrassing, and embarrassment can be regarded as a social cost in a payoff matrix (see Lewis 1969, 6). What Marmor means, however, is that while we may coordinate (that is, conform our behaviour to shared standards) in order to avoid embarrassment, our aim to avoid embarrassment is not itself a coordinative purpose comparable with re-connecting a phone call, meeting in the same restaurant, or avoiding collisions and securing the smooth flow of traffic. I will argue that Marmor is in an important sense wrong.

3. CORRELATION DEVICES

Sometimes finding stable solutions to coordination games benefits from the use of external items referred to as 'correlation devices.' Francesco Guala and Frank Hindriks argue that correlation devices are the key to understanding institutions. If stylistic conventions can be seen as institutions (of sorts), then perhaps they can be interpreted as correlation devices (Hindriks, 2021)? If so,

this would be the most straightforward way of showing Marmor to be wrong.

Here's an instructive example of a correlation device (taken from Guala 2014, 44–51; see also Hindriks & Guala 2015). Suppose two nomadic tribes let their cattle graze on various patches of land. If they both let their cattle graze on the same patch, this leads to a fight, which is the least desirable outcome for both parties. If they end up on the same piece of land but decide to avoid fighting by not letting their cattle graze, this is a slightly better outcome for both. If one tribe lets their cattle graze while the other does not, a fight is avoided too. This is the best outcome for the tribe with the grazing cattle; for the other tribe the outcome is as good as when both parties refrain from letting their cattle graze. Figure 2 shows the possible outcomes of the various strategies. Both symmetric solutions (G, NG and NG, G) are Nash equilibria, as unilateral deviation would be detrimental. These equilibria are unfair—one party gets more than the other. While in real life unfair equilibria do exist and perpetuate, it is in our nature (and perhaps in the nature of other animals too (Brosnan and De Waal, 2014)) to feel resistance to this unfairness, especially when we are the disadvantaged party. Work on ultimatum games is instructive in this

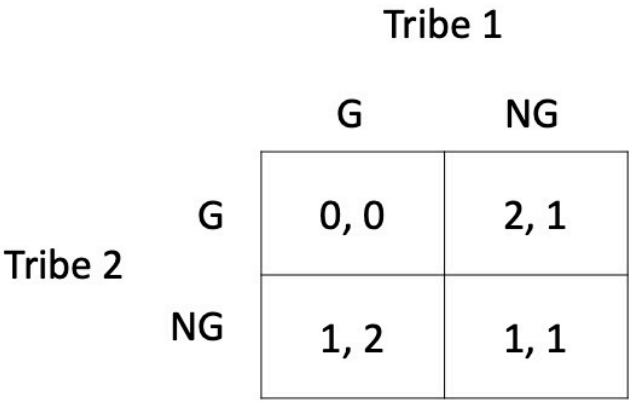

Figure 2. Outcomes of the grazing game (a.k.a. 'Hawk-Dove' or 'Chicken'); 'G' stands for 'graze,' NG stands for 'not graze.'

respect (Harsanyi, 1961). In such games a proposer divides as sum of money. If the receiver accepts the offer, both get their sums as determined by the proposer. But if the offer is refused because it is deemed too unfair, nobody gets anything. Almost everyone is willing to forgo receiving a sum of money and punish a proposer by refusing an unfair division, although there are huge cultural differences in what counts as unfair (Henrich and Muthukrishna, 2021). Let us assume, then that in this fictitious example, in G/NG situations, the NG party may at some point decide to punish unfairness (by letting their cattle graze) even if this leads to a lesser outcome for themselves. This possibility means that the equilibria are not stable.

Now suppose that the land is divided by a river that neither of the tribes can cross. If one tribe is on the land North of the river and the other on the land South of the river, there is no coordination problem to be solved. Until the river runs dry, leaving a mark on the land; a natural boundary. This boundary allows for a set of strategies that were not available in the original grazing game: both tribes can choose to keep to the original 'set up' in which they let their

		Tribe 1		
		G	NG	G if S, NG if N
Tribe 2	G	0, 0	2, 1	1, 0.5
	NG	1, 2	1, 1	1, 1.5
	G if N, NG if S	0.5, 1	1.5, 1	1.5, 1.5

Figure 3. The grazing game augmented with a boundary and implicit rules; G if N means 'graze if North of the boundary'; 'NG if S' means 'not-graze if South of the boundary.'

cattle graze on one side of the boundary only. Thus, one tribe can keep to the rule 'graze if North of the boundary, not-graze if South of the boundary,' while the other tribe can keep to the opposite rule. Figure 3 shows the outcomes of the grazing game with the new strategies included.

The augmented grazing game has a fair equilibrium in the lower right corner; if both tribes settle on sticking to their implicit rules, they end up in a distribution of pay-offs that leaves little incentive for unilateral deviation. The dry river boundary is what is known as a 'correlation device' (Aumann, 1974; Vanderschraaf, 1995).

The dry riverbed is a special kind of correlation device because it allows for new options the tribes can choose from; options that are not available without it. Other correlation devices do not offer new options to choose from but simply enhance coordination. Think of cars approaching an intersection that would collide if neither of them stops. Driving carefully and moving forward only when one sees that the other drivers is inclined to stop is one way to coordinate. But adding traffic lights is a much safer option. Traffic lights do not change the options drivers can choose from—driving on or stopping—but they do help to coordinate who does what, when. They do so by allowing for a new rule—stop in front of a red light, drive when the light is green—that would not be available without them. Both the riverbed and traffic lights allow for coordination strategies that would not be available without these correlation devices.

Might stylistic conventions be understood as correlation devices? If so, the question is, what kinds of coordination game require augmentation by shared practices of adhering to stylistic conventions?

4. ROLES AND MARKERS

Games such as the above, in which coordination is achieved when all parties act according to the same rule, are known as correlative coordination games. But if we look at the characterization of the coordinative function of stylistic conventions in Oberg's description of culture shock, we can see that rules are often used in the service of the social *roles* we play. How does one behave towards a host when being a guest at a party? What is one supposed to wear? How is a customer to behave at the hairdressers? Does one tip? How does one address superiors at work? Or Janitors? How does one even recognize and differentiate between these roles? Roles only figure implicitly in Lewis' analysis of conventions (in the telephone case, for example, we can distinguish between the caller and the receiver). So, in order to see how Marmor might

have been wrong about stylistic conventions, we should look at games in which different players play different roles or divide labour, known as complementary coordination games. Can we apply the idea of correlation devices, or something similar, to such games? Cailin O'Connor shows that we can. Importantly, she includes stylistic conventions in her discussion.

Division of labour can be modelled as a complementary coordination game, that is, a game in which equilibria require players to act in different, complementary ways (O'Connor 2019, 34–6). Suppose that A and B are two tasks that both need to be performed. Player 1 and player 2 can each perform only one task or both tasks. If they perform both tasks, the tasks are not executed as well as when they specialize in either A or B. This leaves us with the following pay-off matrix (figure 4).

The worst outcome here is when only one of the tasks is performed. A slightly better outcome is if at least one player performs both tasks. It is even better when both players perform both tasks. But the best option is for each to specialize in different tasks—i.e. division of labour.

Lewis did not consider complementary games to be of a different kind than correlative games; a complementary game can be re-described as a correlative one. The telephone case can be described as a case with two roles—

		Player 1		
		A	B	A and B
Player 2	A	0,0	3,3	1,1
	B	3,3	0,0	1,1
	A and B	1,1	1,1	2,2

Figure 4. Example of a simple complementary game modelling division of labour

caller and receiver—and divided labour; a complementary game in which an equilibrium is reached when both act differently (the caller initiates another call while the receiver waits, or vice versa). But it can also be conceived of as a correlative game that is solved when both stick to the same rule that comprises both roles—as Lewis does. Similarly, the above case of dividing labour can be transformed into a correlative game in which an optimal equilibrium is reached when both players follow the same rule, such as 'specialize in the tasks that the other player does not specialize in.' Solving a complementary game can thus be thought of as transforming it into a correlative game with a single rule as a solution.

But what if players have to choose simultaneously, without communicating? If there is no way of knowing what task the other player will choose, the above rule is useless. This is where O'Connor proposes that markers will help. We need to alter the rule by introducing ways to distinguish the two players such that tasks can be assigned. For example, we can say that the tallest person specializes in A and the shortest in B. 'The tallest person' and 'the shortest person' are markers that function as a kind of correlation device. They are public signals that help to form a rule that secures the best coordination strategy. To be sure, the (A and B, A and B) option in the lower right corner is a Nash equilibrium too, as it leaves no incentive for unilateral deviation. But it is not the most optimal way of coordinating. Using markers as correlation devices help to make sure that the (A, B) or the (B, A) options are chosen and proper division of labour is secured.

O'Connor argues that permanent markers such as sex, age and race are the most salient and probably the first markers that most human groups use to coordinate division of labour. Roles are assigned by means of using (implicit) rules that involve such markers. Importantly, she argues that various alterable markers are used as well, including dress, hairdos, demeanour, accent, et cetera. On this proposal, then, stylistic conventions can have a coordinative function. However, in O'Connor's argument, this use is limited to emphasizing or highlighting permanent markers. For example, dress codes are often used to distinguish age groups from each other. It is highly likely, though, that most of the signs and cues Oberg speaks of are not specifically linked to permanent markers, for the simple reason that in most societies, there are considerably more roles than permanent markers. So, the question is whether O'Connor's proposal to regard permanent markers as correlation devices can be applied to alterable markers as well, when these are not used to highlight permanent ones?

In the above case, markers are used as tools to arrive at an efficient role-division. They allow for the existence of rules—implicit or explicit—that assign

tasks or roles to individuals.[4] Permanent markers are suited for this purpose. But crucially alterable markers are not. Suppose we want to coordinate role-assignment in the game of figure 4 by introducing the rule that people who wear hats should do task A while task B is for the hat-less. This rule is helpful to some extent because it dictates that nobody should do A *and* B. But we still need to coordinate on who does what and for that alterable markers are ill suited: anyone wearing a hat who would rather do B would take their hats off. Alterability defeats the purpose of using a given marker as a means to decide on role-assignment. Of course, we may think of all kinds of situation in which alterable markers are fixed to individuals nevertheless, such as ordaining certain people to wear hats. But in such cases the hats would merely facilitate role-assignment; roles are assigned *de facto* by those who determine who is to wear a hat.

And yet, associating wearing hats with specific tasks, *can* have a coordinative function. Deliberately wearing a hat would function as a signal that one is about to take on task A, in this example. It does not function as a means to assign a given role, but it does function as a signal of having taken on that role. That, of course, *does* help us to coordinate (if we are to collaborate, I might take off my hat when I see you wearing one and start on task B), but not in the way that rules such as 'the shortest person should do task A' do. Alterable markers are useful for role-*marking*, not for role-*assigning*.

When markers are used in the service of role-assignment, they are used as correlation devices. Is this also the case when they are used in the service of marking roles? I will argue that they are. But not exactly in the sense outlined in §3. In order to explain why, we must first look at when role-marking is required.

5. ROLE-INTERACTIONS AND STYLISTIC MARKING

Role-marking is important when roles are interdependent in the sense that carrying out one role involves having to interact with several other roles. When there is no role-interaction, there is no need for signalling; when a search party for a missing person decides to split up, assigning a different part of the area to each member, there is role-division but no need for role-signalling. In most economies and social institutions, however, roles are highly interdependent. Being a university professor involves interacting with students, supporting staff, publishers, board members of journals, funding committees, etcetera. Being

4 In our example tasks and roles are interchangeable, but in real life, roles usually consist of many tasks.

an employee in a supermarket involves interacting with a hierarchy of different roles of supermarket personnel, suppliers, cleaning personal and customers. Role-interactions are facilitated by quick recognition of (i) who plays which role, (ii) when certain transactions in an interaction transpire in mutually agreed ways, and (iii) where specific role-interactions (are likely to) take place. Stylistic conventions function as markers in all three cases.

(i) Quick and easy ways of recognizing who does what are often as essential as quickly recognizing pieces on a game board when playing a game of chess. If we compare the rules of chess with the role-interactions prescribed by economic arrangements (the farmer needs to sell grain to the miller and buy bread from the baker, who buys flour from the miller, etcetera) and/or institutional arrangements (the lieutenant taking orders from a superior but not from a soldier, the teacher who interacts differently with pupils, parents and the headmaster, etcetera), then the styling of chess pieces can be compared with stylistic role-markings. Role-marking in its clearest form can be found in the use of uniforms that allow us to recognize policemen, doctors, garage personnel, janitors, builders, military people, firemen, school children in some countries, et cetera. But we can also think of the typical styles of dress that are associated with certain professions. These are usually not as standardized as uniforms, but we have no problem telling a rock guitarist from a corporate lawyer or a butcher. And when we pay a little more attention, we can discern dress codes that obtain within specific sub-groups in society, and within sub-cultures even more subtle cues are used to signal hierarchy or dominance positions. It is hard to think of any style of clothing that does not mark roles within groups in any way. Children are socialized from very early on to be susceptible to such role-marking (Lutz and Keil, 2002).

Apart from clothing there are other role-markers. Think of demeanour. For the trained perceiver, the use of gestures, table manners, vocabulary, and accent can reveal a host of information about social status, upbringing, and cultural roles. But we can also think of such things as the (conventional) spatial location of people as markers that signify roles. A person standing in front of a classroom is probably a teacher, a person heading a military parade is a higher-ranking officer, a person standing behind a shop counter is personnel, a person in the largest office in the building is probably the boss, etcetera.

(ii) Many role-interactions have a script-like structure. Sampling the wine one has ordered before the waiter pours the glasses of the other persons at the table in an expensive restaurant, checking out at the supermarket, having a check-up by your GP, having a casual talk with a friend, collecting a book at the library counter, getting information about a mortgage from the bank,

teaching a class of students, etcetera, are more or less scripted (Meng, 2008; Shank and Abelson, 1977). Specific transactions within such interactions, like openings and endings, but also intermediate steps, are often marked by stylistic conventions. Opening transactions may consist of simply stepping into a shop, prompting the shop attendant to ask 'how can I help you,' of shaking hands or bowing, of starting to eat as the host of a diner party, or simply of looking each other in the eye. Intermediate transactions may consist of raising a hand—at an auction, causing the auctioneer to ask for higher bids, or at a vote session in a meeting—hammering when a decision is taken in a meeting, giving each other a high five when a joke is made, or nodding to a waiter that the wine is to one's taste. Similarly, we have a range of conventions for ending interactions, like shaking hands (again), waving, thanking, or saying goodbye.

Importantly, we combine role-markers and transaction markers and sometimes the use of transaction markers also functions as role-marker (e.g. how we say goodbye or greet may reveal rank or class). The use of such markers facilitates role-interactions by proving a 'vocabulary' that we can use to send complex messages. This is reminiscent of what is known as the 'productivity' of language. By varying and playing with conventions we can provide an infinite array of much more subtle and nuanced cues about our intentions, roles, and social statuses. Consider the simple example of formal male dress in European-American counties. Wearing a suit but not a tie, for instance, conveys a degree of formality but mixed with some looseness. Choice of words, gestures and comportment underscores either the formality or the looseness and adds further nuances. And then there is an important part to play for shoes, hairdo, and to a lesser extent belts and socks in signalling allegiance to certain social sub-groups. All of this is highly sensitive to expectations connected with different occasions. Wearing a suit without a tie at a soccer game, a formal dinner, or at the office conveys very different messages.

With this vocabulary-like approach to cultural conventions, we can even assign a coordinative role to the convention of holding one's fork in one's left hand—Marmor's example. By following this convention, one signals to the other people at the table that one has had a certain upbringing, that one belongs to the group that is acquainted with this convention, and that one does not want to offend others. In itself this falls short of signalling (a) social role(s). But it does contribute to a set of signals, that also includes dress, demeanour, the contents and style of conversation, that indicates in a more precise manner that one is a potential partner for certain kinds of exchanges, many of which are role-based. It is part of a script for polite dining that is a format for specific kinds of role interaction, depending on circumstances. The mundane character of

this convention makes this coordinative use inconspicuous. To see its relevance nevertheless, we might ask what message we would send by *not* using the stylistic convention.

(iii) Apart from role-marking and transaction-marking there is at least a third way in which stylistic conventions facilitate role-interactions. Most role-interactions take place at specific locations. Stylistic conventions in architecture serve as markers signifying the function of locations for specific role-interactions. We immediately recognize churches and mosques, office buildings, gas stations and supermarkets, police stations and doctor's offices. And inside, say, an office building, offices, public spaces, meeting rooms, the reception, the restaurant, etcetera—places where different kinds of role-interaction take place—are easily recognizable through stylistic conventions.

Role-markers, transaction-markers, and location-markers facilitate role-interactions in complex societies in the same way as the styling of chess pieces helps us to play a game of chess. A society with complexly divided roles in which every person looks alike, in which all buildings are similar, and in which no one uses any form of etiquette would not function well—and that is a gross understatement. Playing one's roles would be much like playing chess with identically looking pieces where one must remember which piece is which by tracing its whereabouts on the board back to their original positions at the start of the game. Perhaps some people would be able to do this (but at what cognitive costs?), but not ordinary mortals. Similarly, making up for the lack of information about roles and interactive intentions and opportunities in a society without stylistic markers—by linguistic communication and social cognitive inference for example—will at best take up a very significant amount of the cognitive resources, but is more likely to be impossible in societies of any complexity. Conventional stylistic marking serves the purpose of making role-interactions in complex role-divisions cognitively tractable.

6. PRIMARY AND SECONDARY CORRELATION DEVICES

I want to argue that the function of stylistic conventions as outlined in the previous section can be compared to the function of alterable markers in O'Connor's proposal. Alterable markers, on her proposal, can highlight or emphasize permanent markers that serve as correlation devices in complementary coordination games. When tasks or roles are assigned on the basis of race, sex, or age, say, clothing styles, hairdos and other ornamentations often help to make these permanent markers more visible and readily recognizable. In the instances of the coordinative use of stylistic conventions

discussed in the previous section, most role-divisions will not be connected with permanent markers. They will rather be based on considerations, decisions, and processes specific to local economies, institutions, traditions, and organizations. It is not likely that such role-division can be modelled in game-theoretical terms—in this respect Marmor was probably right. What I want to suggest, however, is that the use of alterable markers as correlation devices, suggested by O'Connor, involves a kind of second-order coordination—coordination in order to facilitate coordination—that can also be discerned in the use of stylistic conventions to facilitate role-interaction.

Let me go over this comparison a bit more slowly. In O'Connor's example, permanent markers are the primary correlation devices; they allow for solutions to the complementary coordination game of role-division—just like the dry riverbed allows for a solution to the coordination game of the tribes with their grazing cattle. Alterable markers are used to make permanent markers cognitively more tractable (compare: marking the dry riverbed by sticks or by planting bushes). Both are correlation devices in the sense that both are public signals that are used to correlate the actions of individuals; both are preconditions for efficiently coordinating on role-division. But they are preconditions in a slightly different way: what I will call the primary correlation device (the permanent marker) is a logical precondition for the existence of a rule that divides labour. The secondary correlation device(s) (the alterable marker(s)) allow(s) us to put that rule to use.

It may be thought that the alterable marker is no more than an optional extra. If we look close enough, we can usually discriminate sex, for instance; perhaps dress codes and other markers only emphasize what might also be known with a little more effort. But note that we can switch the example from sex-based role division to clan-based role-division (in a society large enough not to be able to know which individual belongs to which clan in most cases) without changing its logical structure. Now suddenly the alterable marker becomes absolutely essential for the rule to be used. Even though we can conceive of the rule 'members of clan X do task A, while members of clan Y do task B' in abstraction from any markers, when there is no way to tell who belongs to which clan, there is no way to know whether or not the rule is obeyed. Members of both clans may hence simply take on the task they fancy (barring the option that relatives will interfere). An instructive parallel of this use of alterable markers as secondary correlation devices that highlight otherwise intractable categories can be found in modelling experiments in which pre-play signalling of markers that represent e.g. social class turn out to influence the strategies of partners in bargaining games quite

considerably (Bright et al., 2022; Popa Wyatt et al., unpublished). Class or clan can function like O'Connor's primary correlation device in the sense that they allow for the formulation of rules for role-division. But unlike permanent markers, they are not visible. They are turned into public signals by alterable markers that validate the application of the term 'correlation device.'

I want to claim that stylistic conventions enable role-interaction in complex societies in ways that are comparable to the way that alterable markers highlight e.g. clan or class. They highlight roles, transactions and locations for role-interaction that are conceivable but not recognizable in abstraction from them. Thus, they are practically speaking necessary prerequisites for complex role-interactions to be possible and hence for complex role-divisions to exist. Public signals that fulfil this job description are correlation devices.

Stylistic conventions are not logical prerequisites for the rules that assign roles. When roles are divided and interconnected in more complex societies, this is based on economic processes, cultural-institutional considerations, and organizational decisions that hinge on such things as socio-economic situation, talent, kinship relations, tradition, and a lot more. To play one's roles in economic division of labour, cultural institutions, and organizations, one must have shared knowledge of the rules pertaining to how roles are interconnected that result from such considerations, decisions, and processes. One must share some general knowledge of how roles are interrelated—how lawyers relate to judges and juries, how merchants relate to suppliers and customers, how teachers relate to pupils and parents—and some more specific knowledge of how one's own roles connect and intersect with the roles of those one must interact with in order to carry them out; knowledge that is shared with one's interlocutors. This knowledge accounts for primary coordination. In role-interactions, primary coordination is achieved when the right roles interconnect and when the role-interactions are performed so as to let the role-division do what it must.

It is unclear whether primary coordination in the case of role-interaction can be modelled in game-theoretical terms. I take it that Marmor's critique is meant to highlight exactly that. But this does not preclude the use of alterable markers as secondary correlation devices. For without these markers, shared knowledge of how roles interrelate and how role-interactions are meant to go down remains as abstract and invisible as being a member of a clan is without any publicly recognizable markings. The status of stylistic conventions as secondary correlation devices explains a salient feature of them. Stylistic conventions are often fairly loose and non-strict. There is a degree of variation when men are asked to wear 'tenue de ville' at a specific occasion. There is

a degree of variation in how to execute a wine-tasting script in a restaurant. There is a degree of variation in addressing one's GP or the teacher's addressing her pupils. This variation, however, does not defeat the coordinative purpose of stylistic conventions. Precisely because they serve as *secondary* correlation devices, their interpretation is limited and co-determined by the primary coordination they are meant to enable. Consider once more the chess parallel: there are rather different stylistic versions of the different pieces of the chess game. But the (primary) rules of chess help to limit the interpretation of the (secondary) rules relating styling to roles. There are only six roles in the game and the place of the pieces on the board at the start of the game (and their numbers) help to interpret which piece is which. Stylistic variation does not defeat the secondary coordinative purpose. Similarly, stylistic conventions in complex societies are used as secondary correlation devices in situations of primary coordination that limit their interpretation and hence leave some room for variation.

7. CONCLUSION

With his introduction of the notion of culture shock, Kalervo Oberg suggested that conventions such as dress codes, etiquette, hairdos and the styling of architecture—the "signs and symbols of social intercourse"— take on a coordinative function in our social lives. Being confronted with a new set of such stylistic conventions may, in the long run, affect the smoothness of our daily social interactions and erode our sense of belonging. Andrei Marmor, however, argues, based on David Lewis' analysis of the coordinative function of conventions that such "signs and symbols" do not serve a coordinative purpose. I have argued that Oberg is right while Marmor is only partly right. Marmor may well be correct in claiming that stylistic conventions do not serve a primary coordinative function. But by arguing that the use of secondary correlation devices enable primary coordination by making certain categories tractable—whether these are permanent markers, clan- or class-membership, role, transactions in interactions, or locations for specific interactions—, we can assign a similar role to stylistic conventions relative to the primary coordination of complexly interconnected roles. We share dress codes, hairdos, etiquette, and many other stylistic conventions as role-markers, transaction-markers, and location-markers that facilitate and enable coordinated division and interaction of roles in societies with complex economies, institutions, and organizations.

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