Addendum: A model of citizenship behaviour

We have categorized existing explanations for individual motivations for citizenship behaviour into a 2×2 grid which is described in Figure 1.

We distinguish two kinds of individual motivation (which motivation is also called individual strategy in the literature) for engaging in citizenship behaviour: *Tit for Tat* and *symmetry*. Both of these explanations have been derived from game theory as political science and organizational behaviour dealt more with the conditions of citizenship behaviour (or with motivations behind incidental decisions to help out others) as opposed to investigating individual inclanations to engage in citizenship behaviour. However, although game theory addresses individual motivation for cooperation, it is tacit with its description of this motivation as it is not the main area of its interest. Therefore, in describing the game theorist explanation for individual motivation for cooperation we do not insist on a literal description of these concepts but rather claim to capture the "spirit" of these while in the same time also taking these further to describe individual inclanations for citizenship behaviour.

The Tit for Tat strategy was used to describe individual motivation for cooperation by Axelrod. Tit for Tat strategy basically means that individuals are responsive to the behaviour of their partners. Those who are motivated by Tit for Tat will start out with a cooperative behaviour which they keep up as long as their partners are also cooperative. However, if their partners defect from cooperative behaviour they respond in a similar non-cooperative way towards those partners who failed to cooperate while keeping up their cooperative behaviour with others. Individuals who are motivated by Tit for Tat are also ready to restore their cooperative behaviour with non-cooperative partners as soon as the non-cooperative partners revert back to a cooperative behaviour.

Individuals might adapt a Tit for Tat strategy for *external* or *internal* reasons. The external reason could be social pressure or control. Externally motivated individuals will only use Tit for Tat when others can monitor their behaviour and when others can reward or punish such a behaviour. These individuals, however, will defer from Tit for Tat into non-cooperative behaviour when no social monitoring is present or when others could not punish non-cooperative behaviour.

Individuals, however, might follow Tit for Tat for internal reasons, rather than for external reasons. This occurs when they cooperate simply because

Figure 1: Sources of citizenship behaviour

	Tit-for-tat	Symmetry
External	Social pressure	Moral Projection
Internal	Internalized values	Survival instinct

they hold pro-cooperation norms and values.

The symmetry arguement was suggested by Rapoport and others. According to this view individuals project their own beliefs and motivations on to the others. (Note, that symmetry is different from the notion of reacting to the perceived motivation of others.) Individuals will act in a certain way because they believe that others, who they assume are like them, will act the same way as they do. An individual behaving according to this principle is in effect denying the independence of their choice and the choice of the others. We took further this view, by suggesting that unlike the Tit for Tat players, those who follow the symmetry arguement probably will not be immediately deterred from a cooperative behaviour if their immediate partners do not cooperate. They will keep up their cooperative behaviour, even towards non-cooperating partners, for long by finding reinforcement to their beliefs in the behaviours of those who chose to cooperate and they will hope that their good example will incourage others to cooperate as well.

In the externalized version of the symmetry arguement individuals will cooperate because they believe that if they would decide otherwise everybody else would and thus everybody would suffer from the consequences. We suggest, however, that if for a long time, individuals repeatedly will find that nobody else cooperate they might entirely withdraw from cooperation (ie, they develop a pessimistic view about the others) even if others will start cooperating.

According to the internalized version of symmetry biological creatures will cooperate within their narrower (e.g., family) or broader communities (e.g., within their species) because they are aware (or their biological instict tells them) that their prosperity is indefinitely tied to the prosperity of their communities. We suggest that those who follow this strategy will believe that everybody else in the community is motivated to serve the prosperity of other community members and the community as a whole. This beliefs are quite resistant to change even if there are going to be some free-riders within the community.

1 Conditions which enhance the above motivations

At this stage we can only speculate for what conditions would enhance cooperative behaviour assuming different types of individual motivations.

We speculate, that if individuals are driven by *external Tit for Tat* the best way to motivate them to citizenship behaviour is to ensure that their behaviour will be monitored by others and that they will be punished for a non-cooperative behaviour. Thus, for example, in an organizational setting, a formal controlling and monitoring system or a reward system which penalizes non-cooperative behaviour would be the conditions to enhance citizenship behaviour.

We also speculate, that if individuals are driven by *internal Tit for Tat*, citizenship behaviour could be reached by developing an organizational culture which highly values cooperative behaviour. In this case incentives should also be such which on the long term (e.g., promotion) reward cooperative behaviour.

We suggest, that if individuals are driven by *external symmetry* the way to motivate them is to create possibilities for a broad network of informal communications where individuals with strong citizenship drive could seek each other out and reinforce their positive drive for cooperation. Citizenship behaviour could also be enhanced by creating conditions in which trust relationship could be developed among organizational members and between organizational members and the global organization. Such trust relationship might be reached by frequent communication or by the existance of fair procedures and distribution system within the organization.

We speculate, that if individuals are driven by internal symmetry than the way to motivate them is to enhance their sense of belongingness to their organization and to create an atmosphere where they feel that their fate is tied to the fate of the organization. This could be reached by tying the future of the individuals to the future of the global organization (e.g., pension schemes, long term employment) and by keeping up the alertness of organizations members to the competition from other organizations.

If individuals are motivated by some mixture of the above than the conditions also need to be combined accordingly.

2 Method of investigation

We plan to establish with a series of experiments which motivation(s) or individual strategies underly citizenship behaviours. We also would like to investigate in a similar manner the conditions which enhance citizenship behaviours or give raise to any of the above motivations. Based on the above we could provide prescriptions for organizations on what conditions they need to create if they want to enhance the cooperative behaviour and knowledge sharing among subsidiary members.

Dr. Lívia Markóczy (Cranfield School of Management) will undertake the supervison of the Ph.D student in this project.