# Snap judgements, emotion, and learning about politics

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# Introduction

> "All perceiving is also thinking, all reasoning is also intuition, all observation is also invention" - Rudolf Arnheim

Imagine we are at the airport and we see a bright red had with white lettering on it. You likely imagine a red hat with white lettering. You have well-trodden neurological paths of what the color red looks like, what a hat looks like, and what a hat with white lettering looks like. You are accessing associative memory to not just imagine what each of these things look like in isolation, but you likely have seen these things before.

As this memory is associative, you likely have connected other things as well. Perhaps, you imagine that you are in the Dallas Airport. So you imagine the surroundings of the hat. You likely also imagine more than just the hat and it being in the Dallas Airport, but you likely imagine a wearer of the modal person wearing such a hat. From recency and contiguity, you likely associate such a hat with a white male who might be wearing cowboy boots (especially if you are in Texas).

Now you may feel negatively or positively about the hat and the wearer of the hat. The white lettering says something: "Make America Great Again". You know what political views this hat symbolizes. You likely have a valenced reaction to this individual wearing such a hat that has taken space in your imagination. You have a physiological reaction. Your heart rate increases, hands become clammy, or you may start finding yourself feeling enthusiastic with pulses of energy.

Visual information is a cognitively efficient means by which meaning is communicated. You are reading the prospectus of a dissertation from a political scientist.

You sat down at your desk expecting to read something about politics. The first sentence tells you to imagine a red hat with white lettering on it. Rather than imagining the hat of an Arsenal F.C. fan, your mind jumped rather quickly to filling in more information about the hat and went right to one with political significance to Americans. The means by which this process occurs is of significant interest to those who examine the psychological foundations of learning and memory. While political psychologists have a rich literature on information processing and memory, much of it is conceptualized as a slower and more conscious process. This dissertation proposes a snap-judgement model of politically-relevant visual information to explain how individuals may pre-consciously detect, process, and appraise such information.

The snap-judgement model asserts that it is visual information such as color and shapes that individuals rely on first to process politically-relevant information. From an evolutionary perspective, humans are attuned and adept at detecting and finding meaning from images. From a neurological perspective, processing visual information is much faster as it occurs simultaneously in different parts of the brain as opposed to text which takes a more linear path (Vogel, Dickson and Lehman 1986). Some estimates suggest that visual information can take as little as 13 milliseconds to be percieved (Potter et al. 2014). Visual information is not just processed quicker, but it tends to have potency.

Visual information contains powerful meaning via affect. Visual information such as color contain important affective associations (Cimbalo, Beck and Sendziak 1978). Memory associated with affect pass through the limbic system which mean that they are often easily and quickly encoded, easier to consolidate by placing it in an associative memory network, and will be easier to retrieve later (Kensinger

and Fields 2022).

Political symbology is common in politics and performs a significant role in shaping attitudes and behaviors. Strong partisans use yard signs as an expressive act which often succeed at generating valenced reactions from their neighbors (Makse, Minkoff and Sokhey 2019). Even in seemingly non-political ways, observing stereotyped cultural differences between Republicans and Democrats act as accurate visual cues (such as the modal car in the driveway) of any given neighborhood to make assumptions about the partisan composition of those who live there (Hetherington and Weiler 2018). Evidence suggest that Republicans like the "Republican red" more than they like the "Democrat blue" (Schloss and Palmer 2014).

Connecting the literature on affective memory to existing work in political science on visual information yields the snap-judgement model. Going back to the example of the "MAGA hat" exercise, the "laws" of recency, contiguity, and repitition (Kahana, Diamond and Aka 2022) would suggest that a simple prompt of red hat with white lettering would evoke a particular image. "MAGA hats" are a new but very prominent symbol representing the political views of the Trump-era Republican party. This means that it is easier to recall a "MAGA hat" than a hat with similar characteristics you may have seen years ago. With repitition, the connection is strengthened so that now, you are more likely to assume that I am describing a MAGA hat. As this visual information is encoded, so is the context. This means that when retreiving visual memories of a red hat with white lettering, contiguous neurological networks consolidating other visual information are retrieved as well. This means with memories of red hats with white lettering, you are more likely to recall other contextual information, e.g., the wearer of the hat

and the meaning of the political views of those owning such a hat. As individuals have affective reactions to either congruent or incongruent political views (Iyengar and Westwood 2015; Druckman and Levendusky 2019), these memories should also be higher priority in that encoding, consolidiation, and retrieval should be easier than other neutral visual information (Kensinger and Fields 2022).

The snap-judgement model additionally expands upon extant theories of political information processing. The two leading theories of political information processing are Zaller's (1992) memory-based model and Taber and Lodge's (2006) online model. Both models present John Q. Public as a bayesian updater. The memory-based model presents JQP as one with a very weak prior that is amendable to change with new political information. The online model suggests that JQP heavily relies on their priors and will largely ignore new information that is not congruent with the prior. These models are agnostic to the type of information their models apply to. In their studies, the processing of such information is measured as conscious. Though, Taber and Lodge (2006) suggest that the making prior attitudes "hot" within about 800 milliseconds, it is still unclear what role snap judgements play.

Fitting the snap-judgement model into the online model of information processing, it would suggest that these almost immediate appraisals should help one determine how one engages their attention. Information that activates retrieval for a particular memory tends to encourage attention when the associated affect is positive (Kensinger and Fields 2022). This explains the tendency for individuals to perform poorly at recalling arguments by outpartisans (Lodge, Steenbergen and Brau 1995).

Furthermore, it highlights a subsystem of information processing. Once an

individual forms a snap-judgement, it their priors will take over and the affective reaction will activate a particular behavioral response. However, when incorrect appraisals or an intervening factor that attenuates the cognitive disengagement occurs, it may act as a valuable learning lesson that might have an opposite effect. As affective tagging of information can occur later (Kensinger and Fields 2022), a positive experience despite a negative snap-judgement may weaken the association of a visual object with a negative affective response. Some evidence suggests that such a mechanism is plausible (Santoro and Broockman 2022). As evidence suggests these depolarizing effects tend to be short term (Santoro and Broockman 2022), the snap-judgement model suggests that this is due to the case that such interactions are not often reinforced so those memories are purged and the dampening effects are removed (see Kahana, Diamond and Aka 2022). It may be the case, however, that these are not all too common as individuals tend to avoid engaging with an object representing ideologically incongruent positions (see Mutz 2006; Klar and Krupnikov 2016).

Figure 1 presents a summary of the snap-judgement model. This dissertation sets out to examine whether such a model exists. It will examine snap-judgements as prompted by a number of different types of visual information. The first empirical chapter will examine the speed at which individuals process such individual information by examining their attention to things like color on political yard signs. The second empirical chapter will step back to examine more complex visual information by asking participants to form snap judgements of a neighborhood with varying characteristics. The final empirical chapter will examine the implications of such a model on informal political discussions as they are often seen as a valuable opportunity to reduce affective polarization and to encourage democratic norms

(Levendusky and Stecula 2021; Santoro and Broockman 2022).

# Outline

## Chapter 1

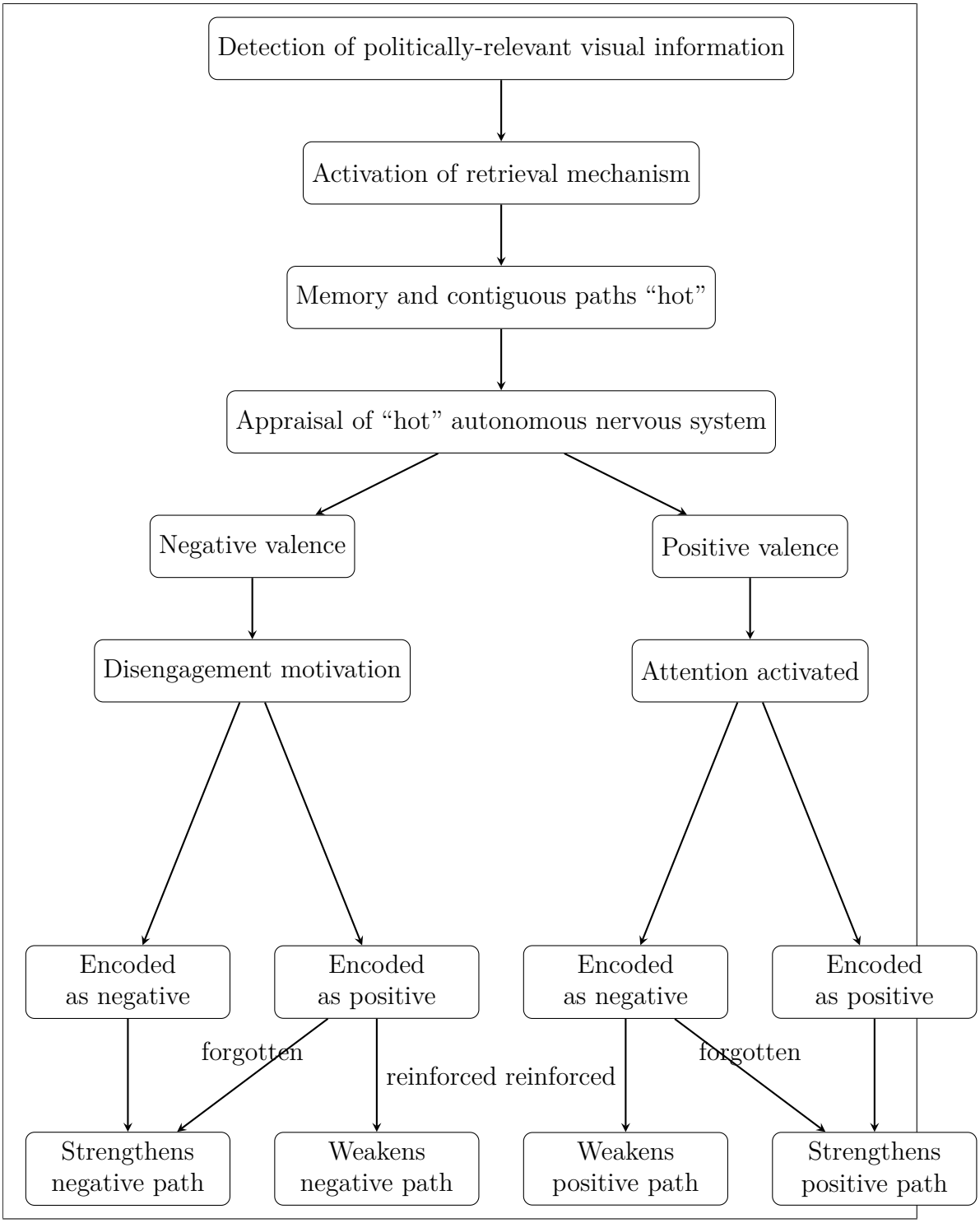


Figure 1: Snap-judgement model of politically-relevant visual information

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